Skills for Employment Investment Program (SEIP)

ASSESSMENT TOOL

FOR

MASONRY

(CONSTRUCTION SECTOR)

Finance Division, Ministry of Finance
Government of the People's Republic of Bangladesh

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PART A – THE ASSESSOR

Instructions to Assessor

Assessment is the process of identifying a candidate's skills and knowledge set against the industry established standards in the workplace. It requires the candidate to consistently and over time demonstrate skills, knowledge and attitude that enable confident completion of workplace tasks in a variety of situations.

In judging assessment evidence, the assessor must ensure that the evidence is:

- authentic (the candidate's own work)
- valid (directly related to the current version of the endorsed competency standard)
- reliable (show that the candidate consistently meets the endorsed unit of competency)
- current (reflects the candidate's current capacity to perform the aspect of work covered by the endorsed unit of competency)
- sufficient (covers the full range of elements in the relevant unit of competency)

There are a number of assessment methods that may be employed including but not limited to:

- written examination
- oral questioning
- practical demonstration

A single unit of competency may be assessed or a group of units of competency may be assessed, either in an actual workplace or a simulated workplace environment.

Conducting Assessment

Prior to commencement of assessment, candidates must have the tasks clearly explained to them. Also, the assessor should provide candidates with clear advice and information about the:

- date, time and place for assessment
- structure of assessment
- number of times performance must be demonstrated or observed
- amount or type of assistance candidates can expect
- assessment environment
- resources required for assessment
- performance standards or benchmarks relevant to the qualification

As well as informing the candidate of what they will be required to do during the assessment, the assessor will also need to explain what evidence they will need to provide in response to the various assessment tasks.

If a candidate is required to submit evidence, any explanation must include specific guidance on:

- what to include as evidence
- how to present the evidence
- how to submit the evidence and to whom

Assessing Competence

Competency-based assessment does not award grades, but simply identifies if the candidate has the skills, knowledge and attitudes to undertake the required task to the specified standard.

Therefore, when assessing competency an assessor has two possible results (assessment decisions) that can be awarded:

- Competent (C)
- Not Yet Competent (NYC)

Competent (C)

If the candidate is able to successfully answer and demonstrate what is required to the expected standard of the assessment criteria, they will be deemed as 'Competent'.

The assessor will award 'Competent' if they feel the candidate has the necessary skills, knowledge and attitudes in all assessment tasks for a given package.

Not Yet Competent (NYC)

If the candidate is unable to answer and demonstrate competency to the expected standard, they will be deemed to be 'Not Yet Competent'.

This does not mean the candidate will need to complete all the assessment tasks again. When applying for reassessment, the focus will be on the specific assessment tasks that were not performed to the required standard.

The candidate may be required to:

(a) undertake further training or instruction

(b) undertake the specific assessment task again until they are deemed to be competent

Recording Assessment Information

When all assessment tasks are concluded, the evidence summary sheet should be completed, signed by all parties, and any outstanding activities or issues actioned.

The assessor should ensure that all appropriate forms are completed and signed by all parties.

CHECKLIST FOR ASSESSOR		
Prior to the assessment I have:	**Tick (✓)**	**Remarks**
Ensured the candidate is informed about the venue and schedule of assessment.		
Received current copies of the assessment criteria to be assessed, assessment plan and evidence plan.		
Reviewed the assessment criteria and evidence plan to ensure I clearly understood the instructions and the requirements of the assessment process.		
Identified and accommodated any special needs of the candidate.		
Checked the set-up and resources for the assessment.		
During the assessment I have:		
Introduced myself and confirmed identities of candidates.		
Collected the admission slips.		
Put candidates at ease by being friendly and helpful.		
Checked completed self-assessment guide.		
Explained to candidates the purpose, context and benefits of the assessment.		
Ensured candidates understood the assessment process and the assessment procedure.		
Provided candidates with an overview of the assessment criteria to be used.		
Gave specific and clear instructions to the candidates.		
Observed carefully the specified time limits provided in the assessment package.		
Stayed at the assessment area during the entire duration of the assessment activity.		
Ensured notes are made on unusual conditions or situations during the assessment and include these in the report.		
Did not provide any assistance during the assessment or indicated in any way whether the candidate is or is not performing the activity correctly (intervened only for health and safety reasons).		

Implemented the evidence gathering process and ensured its validity, reliability, fairness and flexibility.		
Collected appropriate evidence and matched relevance to the elements, performance criteria, range of variables and evidence guide in the relevant units of competency.		
Explained the results reporting procedure to the candidate.		
Encouraged candidates to seek clarifications if in doubt about the pre- and post-assessment activity procedures.		
Asked candidates for feedback on the assessment.		
Explained legal, health and safety, and ethical issues, if applicable.		
After the assessment I have:		
Provided feedback on the assessment decision. This includes the following: ▪ clear and constructive feedback on the assessment decision ▪ information on ways of addressing any identified gaps in competency revealed by the assessment ▪ opportunity to discuss the assessment process and outcome ▪ information on reassessment process (if necessary) ▪ information on appeal (if necessary)		
Prepared the necessary assessment reports. This includes the following: ▪ record the assessment decision using the prescribed rating sheet ▪ maintain records of the assessment procedures, evidence collected and assessment decision ▪ endorse assessment decision to BTEB ▪ prepare recommendations for the issuance of certificate		
Thanked candidate for participating in the assessment.		

Assessment Evidence Guide

The purpose of assessment is to confirm that an individual can perform to the standards expected by in the workplace, as expressed in the competency standards.

To attain the certificate of **Masonry**, a candidate must demonstrate competent skill and knowledge in all the units of competency listed below. Upon successful completion of all assessment activities, a candidate shall be awarded with a certificate.

CODE	UNIT OF COMPETENCY
Generic Competencies	
SEIP-CON-MAS-01-G	Perform computations using basic mathematical concepts
SEIP-CON-MAS-02-G	Apply occupational health and safety (OHS) practice in the workplace
SEIP-CON-MAS-03-G	Communicate in English in the workplace
SEIP-CON-MAS-04-G	Operate in a self-directed team
Sector-specific Competencies	
SEIP-CON-MAS-01-S	Translate drawings, plans and specifications
SEIP-CON-MAS-02-S	Work with hand tools and power tools
SEIP-CON-MAS-03-S	Carry out measurements and calculations
Occupation-specific Competencies	
SEIP-CON-MAS-01-O	Make masonry mortar/stucco
SEIP-CON-MAS-02-O	Carry out pavement laying works
SEIP-CON-MAS-03-O	Pile structural bricks and blocks
SEIP-CON-MAS-04-O	Carry out stone and brick works
SEIP-CON-MAS-05-O	Accomplish masonry surface plastering
SEIP-CON-MAS-06-O	Perform pattern stone finishing work
SEIP-CON-MAS-07-O	Perform wall panelling using bricks/stones
SEIP-CON-MAS-08-O	Apply waterproofing activities in construction

Assessment Evidence Plan

An assessment evidence plan is a document that assists in establishing what evidence needs to be collected by the assessor to ensure that the candidate meets all the appropriate requirements of the competency standard. It usually contains a record of:

- evidence requirements as set out in the competency standard
- who will collect the evidence
- time period needed to collect the evidence

Occupation:	Mason					
Unit Name:	Perform computations using basic mathematical concepts					
Unit Code:	SEIP-CON-MAS-01-G					
Assessment Method:	**P**	**O**	**W**			
	Performance *(including demonstration and observation)*	Oral questioning	Written examination *(including short-answer, multiple choice, and true or false questions)*			
Element	**Performance Criteria**			**P**	**O**	**W**
1. Identify calculation requirements in the workplace	**1.1.** Calculation requirements are identified from workplace information.					√
2. Select appropriate mathematical methods/concepts for calculation	**2.1.** Appropriate method is selected to carry out the calculation requirement.					√
3. Use tool/instrument to perform calculations	**3.1.** Calculations are completed using appropriate tools and instruments.			√		√

Occupation:	Mason					
Unit Name:	Apply occupational health and safety (OHS) practices in the workplace					
Unit Code:	SEIP-CON-MAS-02-G					
Assessment Method:	**P**	**O**	**W**			
	Performance *(including demonstration and observation)*	Oral questioning	Written examination *(including short-answer, multiple choice, and true or false questions)*			
Element	**Performance Criteria**			**P**	**O**	**W**
1. Identify OHS policies and procedures	**1.1.** OHS policies and safe operating procedures are read and understood.					√
	1.2. Safety signs and symbols are identified and followed.			√		
	1.3. Emergency response, evacuation procedures and other contingency measures are determined.					√

2. Apply personal health and safety practices	**2.1.** OHS policies and procedures are followed and practiced.	√		√
	2.2. Personal protective equipment is selected and used.	√		
	2.3. Personal hygiene is maintained.	√		
3. Report hazards and risks	**3.1.** Hazards and risks are identified, assessed and controlled.	√	√	
	3.2. Incidents arising from hazards and risks are reported to authority.		√	
	3.3. Corrective actions are implemented to correct unsafe conditions in the workplace.			√
4. Respond to emergencies	**4.1.** Alarms and warning devices are responded.			√
	4.2. Emergency response plans and procedures are implemented.		√	
	4.3. First aid procedure is applied during emergency situations.	√		

Occupation:	Mason				
Unit Name:	Communicate in English in the workplace				
Unit Code:	SEIP-CON-MAS-03-G				
Assessment Method:	**P**	**O**	**W**		
	Performance *(including demonstration and observation)*	Oral questioning	Written examination *(including short-answer, multiple choice, and true or false questions)*		
Element	**Performance Criteria**			**P**	**O**	**W**
1. Read and understand workplace documents in English	**1.1.** Workplace documents are read and understood.			√		√
	1.2. Visual information is interpreted.				√	
2. Write simple workplace communications in English	**2.1.** Simple routine workplace documents are prepared using key words, phrases, simple sentences and visual aids are prepared.					√
	2.2. Key information is written in the appropriate places in standard forms.					√
3. Listen and comprehend to English conversations	**3.1.** Active listening is demonstrated.			√	√	
4. Perform conversations in English language	**4.1.** Conversation is performed in English with peers, customers and management to the required workplace standard.			√	√	

Occupation:	Mason				
Unit Name:	Operate in a self-directed team				
Unit Code:	SEIP-CON-MAS-04-G				
Assessment Method:	**P**	**O**	**W**		
	Performance *(including demonstration and observation)*	Oral questioning	Written examination *(including short-answer, multiple choice, and true or false questions)*		
Element	**Performance Criteria**			**P**	**O**	**W**
1. Identify team goals and work processes	**1.1.** Team goals and collaborative decision-making processes ate identified.					√
	1.2. Roles and responsibilities of team members are identified.				√	
	1.3. Relationships within the team and with other workers are identified.				√	
2. Communicate and cooperate with team members	**2.1.** Effective interpersonal skills are used to interact with team.			√		
	2.2. Formal and informal forms of communication are used effectively to support team achievement.					√
	2.3. Diversity in character is respected and valued in team functioning.				√	
	2.4. Views and opinions of other team members are understood and valued.				√	
	2.5. Workplace terminology is used correctly to assist communication.					√
3. Work as a team member	**3.1.** Duties, responsibilities, authorities, objectives and task requirements are identified and clarified with team.					√
	3.2. Tasks are performed in accordance with organisational and team requirements, specifications and workplace procedures.					√
	3.3. Team member's support with other members is made to ensure team achieves goals, awareness and requirements.				√	
	3.4. Agreed reporting lines are followed using standard operating procedure.					√
4. Solve problems as team member	**4.1.** Current and potential problems faced by team are identified.					√
	4.2. A solution to the problem is identified.			√		
	4.3. Problems are solved effectively and the outcome of the implemented solution is evaluated.				√	

Occupation:	Mason

Unit Name:	Translate drawings, plans and specifications					
Unit Code:	SEIP-CON-MAS-01-S					
Assessment Method:	**P**	**O**	**W**			
	Performance *(including demonstration and observation)*	Oral questioning	Written examination *(including short-answer, multiple choice, and true or false questions)*			
Element	**Performance Criteria**			**P**	**O**	**W**
1. Access information from manuals, designs and plans	**1.1.** Appropriate manuals are identified and accessed.			√		
	1.2. Version and date of the manual are checked to ensure up-to-date specifications of tools, equipment, materials and procedures.					√
2. Interpret drawings and specifications from manuals, designs and plans	**2.1.** Relevant drawings and specifications are correctly recognized from manuals, designs and plans.			√		
	2.2. Terms and abbreviations are recognized.					√
	2.3. Signs and symbols are interpreted.				√	
3. Store manuals, designs and plans	**3.1.** Manuals, designs and plans are collected and packed.				√	
	3.2. Manuals, designs and plans are stored to prevent damage, and ready access and updating of information when required.				√	

Occupation:	Mason					
Unit Name:	Work with hand tools and power tools					
Unit Code:	SEIP-CON-MAS-02-S					
Assessment Method:	**P**	**O**	**W**			
	Performance *(including demonstration and observation)*	Oral questioning	Written examination *(including short-answer, multiple choice, and true or false questions)*			
Element	**Performance Criteria**			**P**	**O**	**W**
1. Inspect hand tools and power tools for usability	**1.1.** Appropriate tools are selected.			√		
	1.2. Application of tools to job requirements is determined.			√		
	1.3. Usability of tools are checked and verified.			√		√
	1.4. Hand tools and power tools are prepared.			√		
	1.5. Sources of power supply for power tools identified.			√	√	
	2.1. Appropriate hand tool for the job is used.			√		

2. Use hand tools properly and safely	**2.2.** Proper and safe use/operation is applied in the different types of hand tools.	√		
	2.3. Safety precautions are observed when using hand tools.	√		√
	2.4. Unsafe or faulty tools are identified and marked for repair.	√	√	
3. Operate power tools properly and safely	**3.1.** Power supply outlet and electrical cord are inspected and confirmed safe for use in accordance with established workplace safety requirements.	√		√
	3.2. Proper sequence of operation is applied in using power tools to produce results.	√	√	
	3.3. Power tools are used safely in accordance to manufacturer's operating specification.	√		
4. Clean/maintain hand tools and power tools are use	**1.1.** Dust and foreign matters are removed from power tools in accordance to workplace standard.	√		
	1.2. Condition of tools is checked after use.	√		
	1.3. Appropriate lubricant is applied after use and prior to storage	√		
	1.4. Measuring tools are checked and calibrated.	√		
	1.5. Defective tools, instruments, power tools and accessories are inspected and corrected or replaced.	√		

Occupation:	Mason				
Unit Name:	Carry out measurements and calculations				
Unit Code:	SEIP-CON-MAS-03-S				
Assessment Method:	**P**	**O**	**W**		
	Performance *(including demonstration and observation)*	Oral questioning	Written examination *(including short-answer, multiple choice, and true or false questions)*		
Element	**Performance Criteria**			**P**	**O**	**W**
1. Check usability of measuring devices	**1.1.** Appropriate measuring device is selected for the job.			√		
	1.2. Application of tools to job requirements is determined.			√		
	1.3. Usability of tools are checked and verified.			√		√
	1.4. Measuring device is prepared.			√		
	2.1. Measurements are obtained using appropriate measuring device.			√		√

2. Carry out accurate construction work measurements	**2.2.** Systems of measurements are identified and converted where necessary.			√
	2.3. Results are confirmed and recorded.	√		√
3. Execute simple construction work calculations	**3.1.** Simple calculations involving four basic mathematical operations are executed.	√		√
	3.2. Other operations are used to complete tasks in construction works.		√	
	3.3. Appropriate formulas for calculating quantities of materials are selected.			√
	3.4. Calculations are performed and verified.	√		√
	3.5. Material quantities are calculated.	√		
	3.6. Results are interpreted and communicated to authority.	√		
4. Clean and maintain measuring instruments	**4.1.** Dust and foreign matters are removed from measuring instrument.	√		
	4.2. Check condition of instrument.	√		
	4.3. Apply appropriate lubricant after use and prior to storage.	√		
	4.4. Measuring instruments are checked and calibrated.	√		
	4.5. Store instrument in accordance to workplace procedure.	√		√

Occupation:	Mason		
Unit Name:	Make masonry mortar/stucco		
Unit Code:	SEIP-CON-MAS-01-O		
Assessment Method:	**P**	**O**	**W**
	Performance *(including demonstration and observation)*	Oral questioning	Written examination *(including short-answer, multiple choice, and true or false questions)*

Element	**Performance Criteria**	**P**	**O**	**W**
1. Gather mortar making tools, equipment and materials in line with work task	**1.1.** PPE are selected and used.	√		√
	1.2. Tools, equipment & materials are selected and gathered properly.	√	√	
	1.3. Tools, equipment & materials are checked for usability and quality.	√	√	
2. Prepare mortar mixing box/containment	**2.1.** Mortar mixing box/containment is cleaned.	√		
	2.2. Mortar mixing box/containment is prepared.	√		

3. Make mortar/stucco	**3.1.** Sand and cement ratio are maintained and measured.	√		
	3.2. Materials are laid on mortar mixing box/containment as per instruction.	√		
	3.3. Sand, cement and water are mixed in accordance with specification.	√		
	3.4. Transport is used to carry materials at the working place.	√		
4. Clean and maintain the work area	**4.1.** Tools & equipment are cleaned and stored in its proper storage.	√		
	4.2. Mixing box/containment is cleaned.	√		
	4.3. Waste materials are disposed in proper place.	√		

Occupation:	Mason					
Unit Name:	Carry out pavement laying work					
Unit Code:	SEIP-CON-MAS-02-O					
Assessment Method:	**P**	**O**	**W**			
	Performance *(including demonstration and observation)*	Oral questioning	Written examination *(including short-answer, multiple choice, and true or false questions)*			
Element	**Performance Criteria**			**P**	**O**	**W**
1. Gather pavement laying tools, equipment and materials	**1.1.** PPE is selected and used.			√		√
	1.2. Tools and equipment are gathered, checked and prepared.			√		
	1.3. Bricks, paving tiles/blocks are selected, collected and gathered at work site.			√		
	1.4. Mortar/grouting materials are selected, collected and gathered.			√		
2. Prepare concrete making raw materials	**2.1.** Site for mixing of raw materials is defined and located.			√		
	2.2. Tools and equipment are carried to the work site.			√		
	2.3. Brick/Paving tiles or blocks are cut into specified sizes by power saw or paving tile cutters.			√		
	2.4. Mortar/grout making raw materials are carried to work site.			√		
3. Set up base for paving work	**3.1.** Base is selected in accordance with building plan.					√
	3.2. Unnecessary materials are removed from the base site.			√		

	3.3. Forms for pavement making are built in accordance with workplace requirement.	√		
	3.4. Appropriate type of sand is placed on the base in accordance with workplace requirements.	√		
	3.5. Base is levelled and tampered in accordance with workplace specification.	√		
4. Lay paving bricks/blocks	**4.1.** Paving line is set and aligned in the work site.	√		
	4.2. Paving line and perpendicular lines are set up at two ends of the line.	√		
	4.3. Paving bricks/blocks are positioned and levelled.	√		
2. Complete the paving work	**5.1.** Gap between blocks or bricks are filled up with appropriate fillers.	√		
	5.2. Final level check is made and correction is carried out where necessary.	√		
	5.3. Unnecessary materials are removed and cleaned from blocks or bricks.	√		
	5.4. Curing time is observed before use of the newly built pavement.			√
3. Clean/maintain the workplace	**6.1.** Tools and equipment are cleaned.	√		
	6.2. Workplace is cleaned.	√		
	6.3. Waste materials are disposed in its designated/proper place.	√		

Occupation:	Mason					
Unit Name:	Pile structural bricks and blocks					
Unit Code:	SEIP-CON-MAS-03-O					
Assessment Method:	**P**	**O**	**W**			
	Performance *(including demonstration and observation)*	Oral questioning	Written examination *(including short-answer, multiple choice, and true or false questions)*			
Element	**Performance Criteria**			**P**	**O**	**W**
1. Prepare location	**1.1.** Plans are read and interpreted.			√		√
	1.2. PPE is collected and used.			√		
	1.3. Tools and equipment are selected and prepared.			√		
	1.4. Materials are selected and prepared.			√		
	1.5. Building lines are located in accordance with building plan.			√		

	1.6. Location of brick structure and block structure based on reference lines of building is established for proper alignment and dimension.	√		
	1.7. Horizontal and vertical guide for brick and block is installed.	√		
2. Build a concrete footer	**2.1.** Lumber and form boards are installed in accordance to building plan.	√		
	2.2. Form boards are levelled as possible.	√		
	2.3. Width and depth of the footer is set in accordance to workplace specification.	√		
	2.4. Concrete mix or mortar is poured into the form boards.	√		
3. Lay brick or block structure	**3.1.** Bricks and blocks are laid on the line at minimum allowance of 1/16 inch and reinforcing bar is installed.	√		
	3.2. Mortars are spread and filled on the base and gaps of bricks and blocks.	√		
	3.3. Bricks and blocks are positioned and laid.	√		
	3.4. Bricks and blocks are levelled during in each course using appropriate levelling device.	√	√	
4. Finish brick or block laying work and curing	**4.1.** When laying bricks, 2 inches of mortar is spread on the centre area of the row of bricks and use a brick trowel to separate mortar into 2 lines.	√		
	4.2. Two mortar joint spacers are placed on each side edge using the centre of the masonry block or brick as a reference.	√		
	4.3. Block or brick is placed halfway onto the spacer and is tapped until it seats firmly down.	√		
	4.4. Same procedure is continued for each course and level is checked periodically.	√	√	
	4.5. The wall or structure is regularly checked using plumb.	√		
	4.6. Brick and block structure is cured in accordance with workplace specification.			√
	4.7. Completed work is reported for final checking.		√	
5. Clean/maintain the workplace	**5.1.** Tools and equipment are cleaned.	√		
	5.2. Work place is cleaned in accordance with workplace requirements.	√		
	5.3. Waste materials are disposed in proper place.	√		

Occupation:	Mason

Unit Name:	Carry out stone and brick works		
Unit Code:	SEIP-CON-MAS-04-O		
Assessment Method:	**P**	**O**	**W**
	Performance *(including demonstration and observation)*	Oral questioning	Written examination *(including short-answer, multiple choice, and true or false questions)*

Element	**Performance Criteria**	**P**	**O**	**W**
1. Gather masonry working tools, equipment and materials at site	**1.1.** PPE is selected & used.	√		√
	1.2. Masonry working tools, equipment and materials are gathered and checked for usability/quality.	√	√	
	1.3. Transport is used for carrying materials.	√		
	1.4. Scaffolding is set for masonry works.	√		
2. Organise bricks/blocks at work site	**2.1.** Bricks/blocks are cleaned and soaked in accordance to specification.	√		
	2.2. Quality of bricks are checked and segregated.	√		
	2.3. Bricks/blocks are organized at work site in accordance to workplace requirements.	√		
3. Create cement mortar/stucco	**3.1.** Quality of cement, sand and water are determined.		√	
	3.2. Ratio of sand, cement and water are determined in accordance with Construction plan and specification.			√
	3.3. Sand, cement and water are mixed in accordance to workplace requirement/specification.	√		
4. Prepare for brick/block installation	**4.1.** Centre lines of the brick/block work for construction is measured and marked as per drawing.	√		
	4.2. Level marks are obtained to set out complicated levels from given reference.		√	
	4.3. Different levels of building structure are obtained by transferring levels from one point to the other using spirit level or dumpy level.	√		
	4.4. Linear and angular measurements are marked as required.	√		
	4.5. Offset measurements are taken and checked according to drawing or instructions given.	√		
	4.6. String lines are established using threads to facilitate trenching without disturbing the set-out marks.	√		
6. Carry out brick/block installation work	**5.1.** Bricks/blocks are watered for laying as per instruction.	√		
	5.2. Cement mortar are applied uniformly.	√		

	5.3. Bricks/blocks are laid and aligned along the set-out lines following specified bond patterns.	√		
	5.4. Brick closer and bats are used to various standard shapes and sizes as required when laying.	√		
	5.5. Brick joints are filled up with mortar/stucco for better adhesion.	√		
	5.6. Brick courses are aligned vertically & horizontally as per drawing/plan.	√		
	5.7. Racking out of brick joints are done as per instruction.	√		
7. Clean/maintain the workplace	**6.1.** Tools and equipment are cleaned.	√		
	6.2. Work place is cleaned.	√		
	6.3. Waste materials are disposed in proper place.	√		

Occupation:	Mason		
Unit Name:	Accomplish masonry surface plastering		
Unit Code:	SEIP-CON-MAS-05-O		
Assessment Method:	**P**	**O**	**W**
	Performance *(including demonstration and observation)*	Oral questioning	Written examination *(including short-answer, multiple choice, and true or false questions)*

Element	**Performance Criteria**	**P**	**O**	**W**
1. Clean the masonry area prior to plastering	**1.1.** Appropriate PPE is gathered and used.	√		√
	1.2. Scaffolding is prepared as required.	√		
	1.3. Tools, equipment and materials are selected and prepared.	√		
	1.4. Racking out of joints and chipping are performed as required.	√		
	1.5. Surface is cleaned and washed for plastering.	√		
2. Mix plaster materials	**2.1.** Foreign materials and larger particles are separated from sand with the help of sieve/screen.	√		
	2.2. Required quantities of sand are measured and keep them in a dry and plane place.	√		
	2.3. Cement is spread on sand with the right quantity in accordance to specification.	√		
	2.4. Dry cement and sand is mixed until the mixture is uniform.	√		
	2.5. Water is gradually added and mixed to form the specified consistency.	√		

3. Apply plaster on plain surfaces	**3.1.** Mortar is applied on masonry surface.	√		
	3.2. Surface level is checked using appropriate levelling tools.	√		
	3.3. Uneven surface is scratched and repeat while plaster is still soft.	√		
	3.4. Wooden trowel and wetted foam is used to finish the surface.	√		
	3.5. Finished plastered surface is cured in accordance to workplace specification.			√
4. Apply plaster to corners	**4.1.** Corner plastering tools are gathered.	√		
	4.2. Enough amount of plaster is applied to a corner area.	√		
	4.3. Corner is initially set using a flat trowel.	√		
	4.4. Setting the corner is finished using a corner trowel.	√		
	4.5. Check alignment, perpendicularity, angularity and adjusted where necessary.	√		
	4.6. Finished plastered corner is cured in accordance to workplace specification.			√
5. Clean/maintain the workplace	**6.1.** Tools and equipment are cleaned.	√		
	6.2. Workplace is cleaned.	√		
	6.3. Waste materials are disposed in proper place.	√		

Occupation:	Mason				
Unit Name:	Perform pattern stone finishing work				
Unit Code:	SEIP-CON-MAS-06-O				
Assessment Method:	**P**	**O**	**W**		
	Performance *(including demonstration and observation)*	Oral questioning	Written examination *(including short-answer, multiple choice, and true or false questions)*		
Element	**Performance Criteria**			**P**	**O**	**W**
1. Plan out pattern stone work	**1.1.** Elevations, sections and detailed drawings are interpreted and information gathered related to pattern stone work.					√
	1.2. Materials, equipment and man-hours are estimated for completing the job.					√
	1.3. Cement, sand, coarse aggregate and water are checked.			√	√	
	1.4. Quantity of materials is determined.					√

2. Gather tools, equipment and materials	**2.1.** PPE are selected and used.	√		√
	2.2. Tools, equipment and materials are selected and gathered.	√	√	
	2.3. Pattern stone materials are gathered and organized in work area.	√		√
3. Mix pattern stone materials	**3.1.** Mixing location is identified and suitable place is located.	√		√
	3.2. Effect of sand bulking is rectified.	√		√
	3.3. Volume of water is obtained according to given water cement ratio.	√		√
	3.4. Sample of concrete is taken, test cubes are made and slump test is performed under direct supervision.	√		
	3.5. Proper transporting method of concrete is used.		√	
	3.6. Concrete admixtures are identified and used in accordance to workplace requirements.			√
4. Pour cement mixture	**4.1.** Formwork is checked.	√		√
	4.2. Setting time of cement is identified.	√		√
	4.3. Cement mixture is placed in layers and vibrated to avoid air trapping.	√		
	4.4. Pattern stone surface is finished.	√	√	
	4.5. Poured cement mixture is levelled using appropriate levelling device.	√		
5. Complete curing of concrete	**5.1.** Curing of concrete is completed in accordance to workplace requirements.			√
6. Clean/maintain the workplace	**6.1.** Tools and equipment are cleaned and sorted.	√		
	6.2. Work area is cleaned.	√		
	6.3. Waste materials are disposed in proper place.	√		

Occupation:	Mason		
Unit Name:	Perform wall panelling using bricks/stones		
Unit Code:	SEIP-CON-MAS-07-O		
Assessment Method:	**P**	**O**	**W**
	Performance *(including demonstration and observation)*	Oral questioning	Written examination *(including short-answer, multiple choice, and true or false questions)*

Element	**Performance Criteria**	**P**	**O**	**W**

1. Gather tools and materials	**1.1.** Tools and equipment are collected for the brick/stone panelling work.	√		
	1.2. Materials are collected and organized at work site.	√		
	1.3. Scaffolding is installed to stock bricks/stones at heights.	√		
2. Organise for wall panelling works using bricks/stones	**2.1.** PPE are collected and used.	√		√
	2.2. Plans and drawings are interpreted.	√		
	2.3. Materials are checked for usability/quality.	√	√	
3. Prepare wall surface for brick/stone panelling	**3.1.** Wall surfaces are free of foreign materials.	√		
	3.2. Brick/stones used for panelling is cleaned.	√		
	3.3. Wall surfaces are cleaned and primed.	√		
4. Mix mortar/bonding components	**4.1.** Cement mortar/bonding materials are prepared.	√		
	4.2. Mortar components are mixed in accordance to workplace specification.	√		
	4.3. Quality of cement mortar is checked and qualified.	√	√	
5. Accomplish wall panelling works	**5.1.** Setting time of cement is identified.			√
	5.2. Appropriate bonding material for brick/stone panelling is identified and used in accordance with specification.		√	
	5.3. Bricks/stone panelling base is soaked in water.	√		
	5.4. Cement mortar/adhesives are applied uniformly for bricks/stone panelling work.	√		
	5.5. Bricks/stone are installed on walls/panels considering the required lay out/design in accordance with workplace specification.	√		
	5.6. Closer and bats for brick/stone panelling are used.	√		
	5.7. Groves are filled up with cement mortars for better adhesion.	√		
	5.8. Level/alignment is regularly checked and adjusted where necessary.	√		
6. Clean/maintain the workplace	**6.1.** Tools and equipment are cleaned and sorted.	√		
	6.2. Work area is cleaned.	√		
	6.3. Waste materials are disposed in proper place.	√		

Occupation:	Mason

Unit Name:	Apply waterproofing activities in construction		
Unit Code:	SEIP-CON-MAS-08-O		
Assessment Method:	**P**	**O**	**W**
	Performance *(including demonstration and observation)*	Oral questioning	Written examination *(including short-answer, multiple choice, and true or false questions)*

Element	**Performance Criteria**	**P**	**O**	**W**
1. Organise work area for waterproofing	**1.1.** PPE is selected and used.	√		√
	1.2. Work instructions and operational details are obtained for relevant information, planning and preparation.		√	
	1.3. Signage and barricade requirements are identified and removed.			√
	1.4. Tools and equipment are selected.	√		√
	1.5. Materials appropriate to the work application are identified, obtained & prepared.	√		√
	1.6. Environmental requirements are identified and conformed.		√	
2. Prepare concrete prior to waterproofing	**2.1.** Drawings are examined for performance requirements and design requirements.			√
	2.2. Work site is visited and work requirements are confirmed.	√		
	2.3. Waterproofing work is determined in relation to structural elements.			√
	2.4. Waterproofing materials are identified.			√
	2.5. Repairs to damaged areas are made.	√		
	2.6. Application of bond-breaker and waterproofing installation is identified.			√
	2.7. Potential faults, contingencies and techniques are identified.			√
3. Apply waterproofing material	**3.1.** Waterproofing material is checked for conformity and compatibility with substrate material.	√	√	
	3.2. Substrates to be waterproofed are prepared.	√		
	3.3. Substrates are prime coated with waterproofing material.	√		
	3.4. Flashings are prepared and ready for placement and fixing	√		√
	3.5. Reinforcing material is set out and cut for waterproofing junctions and surface requirements	√		√

	3.6. Waterproofing membrane is prepared for installation	√		
	3.7. Waterproofing material is mixed or prepared	√		
	3.8. Waterproofing materials are applied	√		
	3.9. Quality of works is checked and defects are rectified		√	
4. Perform other waterproofing considerations	**4.1.** Finishing requirements are applied in accordance to waterproofing plan.			√
	4.2. Suitable roof sealer is applied if cast is used in place of concrete.			√
	4.3. Drainage is checked to be functional for proper flow of water.		√	
5. Clean/maintain the workplace	**5.1.** Tools and equipment are cleaned and sorted.	√		
	5.2. Work area is cleaned.	√		
	5.3. Waste materials are disposed in proper place.	√		

PART B – THE CANDIDATE

Instructions to Candidate

To be assessed as competent, you must provide evidence which demonstrates that you can perform to the necessary standard the various elements of these units of competency that comprise of the Certificate in Masonry. Assessment of competency requires you to consistently demonstrate skill, knowledge and aptitude (through a variety of assessment tools such as multiple choice, short-answer questions, oral questioning, workplace observation, and practical demonstration) that enables confident completion of workplace tasks in a variety of situations.

In judging the evidence, your assessor must ensure that the evidence is:

- authentic (your own work)
- valid (directly related to the current version of the units of competency)
- reliable (consistently demonstrates of your knowledge and skill)
- current (shows your current capacity to perform the work)
- sufficient (covers the full range of elements comprised within the units of competency)

Furthermore, the assessment process must:

- provide for valid, reliable, flexible and fair assessment
- provide for judgment to be made on the basis of sufficient evidence
- offer valid, authentic and current evidence
- include workplace requirements

There are two types of assessment:

1. Knowledge Assessment - is designed to enable assessment against the various *elements* contained within the units of competency through a variety of activities such as multiple choice, short-answer questions, oral questioning. It is essentially examining your theoretical knowledge.

   This provides the assessor with substantial evidence of your knowledge and aptitude to perform the work relating to the specific unit of competency, in conjunction with other assessment tools such as workplace observation.

   You should complete the knowledge assessment as directed by the assessor and follow all instructions as and when given. If you are unable to complete the knowledge assessment, please speak to the assessor about alternative assessment solutions.

2. Skill Assessment - is designed to enable assessment against the various *performance criteria* contained within the units of competency through, for example, demonstration of skill in a simulated or actual work environment. In essence, it is an examination of your practical ability.

   This provides the assessor with substantial evidence of your ability to perform the work relating to the specific unit of competency to the standard expected by industry (the benchmark).

   You should complete the skill assessment as directed by the assessor and follow all instructions as and when given, ensuring your own health and safety.

Once you have been assessed as competent against all of the units of competency comprising of the qualification being undertaken, you will be awarded your certificate.

You assessor will discuss in more detail the requirements for assessment for each unit of competency at the appropriate time.

And please do not panic if you are not assessed as competent on any part of your qualification at your first attempt. Your assessor will discuss with you any identified skill and knowledge gaps, work through those with you and assist you as much as possible in attaining competency.

Self-Assessment Guide

Before undertaking any assessment, you should review the list of skills, knowledge and aptitudes relating to the assessment (drawn from the units of competency, its various elements and performance criteria) to determine whether you have current competency in these areas.

If you believe you can demonstrate the skills and knowledge required and can successfully complete the various assessment activities, you should then proceed to discuss your assessment with the assessor and complete Assessment Agreement.

However, should you not believe, for whatever reason, that you are not able to successfully complete the various assessment activities, then speak with the assessor. The assessor will assist you in identifying any skill and knowledge gaps, work through those with you and assist you as much as possible in attaining competency.

Please complete the self-assessment checklist below and discuss with the assessor.

Qualification:	**Masonry**
Units of competency:	**Generic units:** Perform computations using basic mathematical concepts Apply occupational health and safety (OHS) practices in the workplace Communicate in English in the workplace Operate in a self-directed team **Sector-specific units:** Translate drawings, plans and specifications Work with hand tools and power tools Carry-out measurements and calculations **Occupation-specific units:** Make masonry mortar/stucco Carry out pavement laying Pile structural bricks and blocks Carry-out stone and brick works Accomplish masonry surface plastering Perform pattern stone finishing works Perform wall panelling using bricks/stones Apply waterproofing activities in construction

Instructions:

- Read each of the questions in the left-hand column of the chart
- Place a tick (√) in the appropriate box opposite each question to indicate your answer

Can I?	**YES**	**NO**
▪ Identify calculation requirements from workplace information		

▪ Select appropriate method to carry out calculation requirements		
▪ Complete calculations using appropriate tools and instruments		
▪ Read and understand OHS policies and safe operating procedures		
▪ Identify and follow safety signs and symbols		
▪ Determine emergency response, evacuation procedures and other contingency measures		
▪ Follow and practice OHS policies and procedures		
▪ Select and use Personal Protective Equipment		
▪ Maintain personal hygiene		
▪ Identify, assess and control hazards and risks		
▪ Report incidents arising from hazards and risks to authority		
▪ Implements corrective actions to correct unsafe conditions in the workplace		
▪ Respond to alarms and warning devices		
▪ Implement emergency response plans and procedures		
▪ Apply first aid procedures during emergency situations		
▪ Read and understand workplace documents		
▪ Interpret visual information		
▪ Prepare simple routine workplace documents using key words, phrases, simple sentences and visual aids		
▪ Write key information in the appropriate places in standard forms		
▪ Demonstrate active listening		
▪ Perform conversation in English with peers, customers and management to the required workplace standard		
▪ Identify team goals and collaborative decision-making processes		
▪ Identify roles and responsibilities of team members		
▪ Identify relationship within team and with other workers are identified		
▪ Use effective interpersonal skills to interact with team members and to contribute to activities and objectives		

▪ Use formal and informal forms of communication effectively to support team achievement		
▪ Respect and value diversity in character in team functioning		
▪ Understand and value views and opinions of other team members		
▪ Use workplace terminology correctly to assist communication		
▪ Identify and clarify with team the duties, responsibilities, authorities, objectives and task requirements		
▪ Perform tasks in accordance with organizational and team requirements, specifications and workplace procedures		
▪ Make team member's support with other members to ensure team achieves goals, awareness and requirements		
▪ Follow agreed reporting lines using standard operating procedure		
▪ Identify current and potential problems faced by team		
▪ Identify a solution to the problem		
▪ Solve problems effectively and the outcome of the implemented solution is evaluated		
▪ Identify and accessed appropriate manuals		
▪ Check version and date of the manual to ensure up-to-date specifications, tools, equipment, materials and procedures		
▪ Recognize correctly relevant drawings and specifications from manuals, designs and plans		
▪ Recognize terms and abbreviations		
▪ Interpret signs and symbols		
▪ Collect and pack manuals, designs and plans		
▪ Store manuals, designs and plans to prevent damage, and ready access and updating of information when required		
▪ Select appropriate tools		
▪ Determine application of tools to job requirements		
▪ Check and verify usability of tools		
▪ Prepare hand tools and power tools		
▪ Identify sources of power supply for power tools		
▪ Use appropriate hand tool for the job		

▪ Apply proper and safe use/operation in the different types of hand tools		
▪ Observe safety precautions when using hand tools		
▪ Identify and mark unsafe or faulty tools for repair		
▪ Inspect and confirm safe for use power supply outlet and electrical cord in accordance with established workplace safety requirements		
▪ Apply proper sequence of operation in using power tools to produce results		
▪ Use power tools safely in accordance to manufacturer's operating specification		
▪ Remove dust and foreign matters from power tools and instrument in accordance to workplace standard		
▪ Check condition of tools after use		
▪ Apply appropriate lubricant after use and prior to storage		
▪ Check and calibrate measuring tools		
▪ Inspect and correct defective tools, instruments, power tools and accessories		
▪ Select appropriate measuring device for the job		
▪ Determine application of tools to job requirements		
▪ Check and verify usability of tools		
▪ Prepare measuring device		
▪ Obtain measurements using appropriate measuring device		
▪ Identify systems of measurements and converted where necessary		
▪ Confirm and record results		
▪ Execute simple calculations involving four basic mathematical operations		
▪ Use other operations to complete tasks in construction works		
▪ Select appropriate formulas for calculating quantities of materials		
▪ Perform and verify calculations		
▪ Calculate material quantities		
▪ Interpret and communicate results to authority		

▪ Check condition of instrument		
▪ Apply appropriate lubricant after use and prior to storage		
▪ Check and calibrate measuring instruments		
▪ Store instrument in accordance to workplace procedure		
▪ Clean mortar mixing/box		
▪ Prepare mortar/mixing box		
▪ Maintain and measure sand and cement ratio		
▪ Lay materials on mortar mixing box/containment as per instruction		
▪ Mix sand, cement and water in accordance with specification		
▪ Use transport to carry materials at the working place		
▪ Define and locate site for mixing of raw materials		
▪ Cut into specified sizes brick/paving tiles or blocks by power saw or paving tile cutters		
▪ Select base in accordance with building plan		
▪ Remove unnecessary materials from the base site		
▪ Build forms for pavement making in accordance with workplace requirement		
▪ Place appropriate type of sand on the base in accordance with workplace requirements		
▪ Level and tamper base in accordance with workplace specification		
▪ Set and align paving line in the work site		
▪ Set up paving line and perpendicular lines at two ends of line		
▪ Position and level paving bricks/blocks		
▪ Fill up gap between blocks or bricks with appropriate fillers		
▪ Make final check and carry out correction where necessary		
▪ Remove and clean unnecessary materials from blocks or bricks		
▪ Observe curing time before the use of the newly built pavement		

▪ Install horizontal and vertical guide for brick and block		
▪ Install lumber and foam boards in accordance to building plan		
▪ Level foam boards as possible		
▪ Set width and depth of the footer in accordance to workplace specification		
▪ Pour concrete mix or mortar into the form boards		
▪ Lay bricks and blocks on the line at minimum allowance of 1/16 inch and reinforcing bar is installed		
▪ Spread and fill mortars on the base and gaps of bricks and blocks		
▪ Position and lay bricks and blocks		
▪ Level bricks and blocks during each course using appropriate levelling device		
▪ Spread 2 inches of mortar when laying bricks on the centre area of the row of bricks and use a brick trowel to separate mortar into 2 lines		
▪ Place two mortar joint spacers on each side edge using the centre of the masonry block or brick as a reference		
▪ Place block or brick halfway onto the spacer and is tapped until seats firmly down		
▪ Continue same procedure for each course and check the level periodically		
▪ Regularly check the wall or structure using plumb		
▪ Cure brick and clock structure in accordance with workplace specification		
▪ Report completed work for final checking		
▪ Set scaffolding for masonry works		
▪ Clean and soak bricks/blocks in accordance to specification		
▪ Check and segregate quality of bricks		
▪ Organize bricks/blocks at work site in accordance to workplace requirements		
▪ Determine quality of cement, sand and water		
▪ Determine ratio of sand, cement and water in accordance with construction plan and specification		
▪ Mix sand, cement and water in accordance to workplace requirement/specification		
▪ Measure and mark centre lines of the brick/block work for construction as per drawing		

▪ Obtain level marks to set out complicated levels from given reference		
▪ Obtain different levels of building structure by transferring levels from one point to the other using spirit level or dumpy level		
▪ Mark linear and angular measurements as required		
▪ Take offset measurements and check according to drawing or instructions given		
▪ Establish string lines using threads to facilitate trenching without disturbing the set-out marks		
▪ Water bricks/blocks for laying as per instruction		
▪ Apply cement mortar uniformly		
▪ Lay and align bricks/blocks along the set-out lines following specified bond patterns		
▪ Use brick closer and bats to various standard shapes and sizes as required when laying		
▪ Fill up brick joints with mortar/stucco for better adhesion		
▪ Align brick courses vertically & horizontally as per drawing/plan		
▪ Rack out brick joints as per instruction		
▪ Clean and wash surface for plastering		
▪ Separate foreign materials and larger particles from sand with the help of sieve/screen		
▪ Measure required quantities of sand and keep them in a dry and plane place		
▪ Spread cement on sand with the right quantity in accordance to specification		
▪ Mix dry cement and sand until the mixture is uniform		
▪ Add water gradually and mix to form the specified consistency		
▪ Apply mortar on masonry surface		
▪ Check surface level using appropriate levelling tools		
▪ Scratch uneven surface and repeat while plaster is still soft		
▪ Use wooden trowel and wetted foam to finish the surface		
▪ Cure finished plastered surface in accordance to workplace specification		
▪ Apply enough amount of plaster to a corner area		

▪ Set corner initially using a flat trowel		
▪ Check alignment, perpendicularity, angularity and adjusted where necessary		
▪ Cure finished plastered corner in accordance to workplace specification		
▪ Interpret elevations, sections and detailed drawings and gather information related to pattern stone work		
▪ Estimate materials, equipment and man-hours for completing the job		
▪ Check cement, sand, coarse aggregate and water		
▪ Determine quantity of materials		
▪ Gather and organize pattern stone materials in work area		
▪ Identify mixing location and locate suitable place		
▪ Rectify effect of sand bulking		
▪ Obtain volume of water according to given water cement ratio		
▪ Take sample of concrete, make test cubes and perform slump test under direct supervision		
▪ Use proper transporting method of concrete		
▪ Identify concrete admixtures and use in accordance to workplace requirements		
▪ Check formwork		
▪ Identify setting time of cement		
▪ Place cement mixture in layers and vibrated to avoid air trapping		
▪ Finish pattern stone surface		
▪ Level poured cement mixture using appropriate levelling device		
▪ Complete curing of concrete in accordance to workplace requirements		
▪ Identify and use appropriate bonding material for brick/stone panelling in accordance with specification		
▪ Soak bricks/stone panelling base in water		
▪ Apply cement mortar/adhesives uniformly for bricks/stone panelling work		
▪ Install bricks/stone on walls/panels considering the required lay out/design in accordance with workplace specification		

▪ Use closer and bats for brick/stone panelling		
▪ Fill up groves with cement mortars for better adhesion		
▪ Check and adjust level/alignment regularly where necessary		
▪ Determine waterproofing work in relation to structural elements		
▪ Identify waterproofing materials		
▪ Make repairs to damage areas		
▪ Identify application of bond-breaker and waterproofing installation		
▪ Identify potential faults, contingencies and techniques		
▪ Check waterproofing material for conformity and compatibility with substrate material		
▪ Prepare substrate to be waterproofed		
▪ Prime coated substrates with waterproofing material		
▪ Prepare and ready flashings for replacement and fixing		
▪ Set out and cut reinforcing material for waterproofing junctions and surface requirements		
▪ Prepare waterproofing membrane for installation		
▪ Mix or prepare waterproofing material		
▪ Apply waterproofing materials		
▪ Check quality of works and rectify defects		
▪ Apply finishing requirements in accordance to waterproofing plan		
▪ Apply suitable roof sealer if cast is used in place of concrete		
▪ Check drainage to be functional for proper flow of water		
▪ Clean and sort tools and equipment		
▪ Clean work area		
▪ Dispose waste materials in proper place		
I agree to undertake assessment in the knowledge that the information gathered will only be used for educational and professional development purposes and can only be accessed by concerned assessment personnel and my manager/supervisor.		
Candidate's signature:		**Date:**

PART C – THE ASSESSMENT

Assessment Agreement - Masonry

The purpose of assessment is to confirm that you can perform to the standards expected in the workplace of an occupation, as expressed in the competency standards (after completion of self-assessment and in agreement with assessor).

To help achieve this, an assessment agreement is required to navigate both you and the assessor through the assessment process.

The assessment agreement is designed to provide a clear understanding of what and how you will be assessed and to nominate the tools that may be used to collect the assessment evidence.

You, the assessor and/or workplace supervisor should agree on the assessment requirements, dates and deadlines.

Therefore, to attain the Certificate of Masonry, you must demonstrate competence in the following units, as established in the assessment agreement:

CODE	UNIT OF COMPETENCY
Generic Competencies	
SEIP-CON-MAS-01-G	Perform computations using basic mathematical concepts
SEIP-CON-MAS-02-G	Apply occupational health and safety (OHS) practices in the workplace
SEIP-CON-MAS-03-G	Communicate in English in the workplace
SEIP-CON-MAS-04-G	Operate in a self-directed team
Sector-specific Competencies	
SEIP-CON-MAS-01-S	Translate drawings, plans and specifications
SEIP-CON-MAS-02-S	Work with hand tools and power tools
SEIP-CON-MAS-03-S	Carry-out measurements and calculations
Occupation-specific Competencies	
SEIP-CON-MAS-01-O	Make masonry mortar/stucco
SEIP-CON-MAS-02-O	Carry out pavement laying works
SEIP-CON-MAS-03-O	Pile structural bricks and blocks
SEIP-CON-MAS-04-O	Carry-out stone and brick works
SEIP-CON-MAS-05-O	Accomplish masonry surface plastering
SEIP-CON-MAS-06-O	Perform pattern stone finishing work
SEIP-CON-MAS-07-O	Perform wall panelling using bricks/stones
SEIP-CON-MAS-08-O	Apply waterproofing activities in construction

After successful completion of learning and assessment, you shall be awarded with a certificate.

Assessment Agreement	
Occupation:	Masonry
Assessment Centre:	
Candidate Name:	
Assessor Name:	
Unit of Competency	
Generic Competencies	
SEIP-CON-MAS-01-G	Perform computations using basic mathematical concepts
SEIP-CON-MAS-02-G	Apply occupational health and safety (OHS) practices in the workplace
SEIP-CON-MAS-03-G	Communicate in English in the workplace
SEIP-CON-MAS-04-G	Operate in a self-directed team
Sector-specific Competencies	
SEIP-CON-MAS-01-S	Translate drawings, plans and specifications
SEIP-CON-MAS-02-S	Work with hand tools and power tools
SEIP-CON-MAS-03-S	Carry-out measurements and calculations
Occupation-specific Competencies	
SEIP-CON-MAS-01-O	Make masonry mortar/stucco
SEIP-CON-MAS-02-O	Carry out pavement laying works
SEIP-CON-MAS-03-O	Pile structural bricks and blocks
SEIP-CON-MAS-04-O	Carry-out stone and brick works
SEIP-CON-MAS-05-O	Accomplish masonry surface plastering
SEIP-CON-MAS-06-O	Perform pattern stone finishing work
SEIP-CON-MAS-07-O	Perform wall panelling using bricks/stones
SEIP-CON-MAS-08-O	Apply waterproofing activities in construction

Resources Required for Assessment

Candidates must have access to the following:

- copies of activities, questions, projects nominated by the assessor
- relevant organisational policies, protocols and procedural documents (if required)
- devices or tools to record answers
- appropriate actual or simulated workplace
- all necessary tools and equipment used in performance of the work-based task
- any other resources normally used in the workplace

Assessment Instructions

Candidates should respond to the formative and summative assessments either verbally or in writing as agreed with the assessor. Written responses can be recorded in the spaces provided (if more space is required attach additional pages) or submitted in a word-processed document.

If candidates answer verbally, the assessor should record their answers in detail.

Candidates should also undertake observable tasks that provide evidence of performance. The assessor must provide instruction to candidates on what is expected during observation, and arrange a suitable time and location for demonstration of these skills.

Candidates must fully understand what they are required to do to complete these assessment tasks successfully, then sign the declaration.
Performance Standards
To receive a **satisfactory** result for the assessments, candidates must complete all activities, questions, projects, and tasks nominated by the assessor, to the required standard. Completion of all tasks for a unit of competency, to a satisfactory level, will contribute to an assessment of competence for that specific individual unit (or units if holistic assessment approach is taken). Successful completion of all units of competency that comprise of the qualification **Masonry**, will result in the candidate being issued with the relevant, nationally recognised certificate. Assessors must clearly explain the required performance standards.
Declaration
I declare that: ▪ the assessment requirements have been clearly explained to me ▪ all the work completed towards assessment will be my own ▪ cheating and plagiarism are unacceptable

Candidate Signature:		**Date:**	
Assessor Signature:		**Date:**	

PART D – ASSESSMENT TOOLS

Specific Instructions to Assessor

Please read carefully and prepare as necessary:

1. The assessor shall (practical demonstration assessment activities):
    - provide the candidate with the necessary tools, equipment, machinery and materials for completion of one (1) set of the following practical demonstration assessment activities:
        - Set A:
            - construction of a 250 mm thick corner brick wall using English bond
            - surface plastering on the newly constructed corner brick wall
        - Set B:
            - construction of a 250 mm thick **T** (tee) brick wall using Flemish bond
            - surface plastering on the newly constructed **T** (tee) brick wall
        - Set C:
            - construction of a 125 mm thick **X** (cross) brick wall using Stretcher bond
            - surface plastering on the newly constructed **X** (cross) brick wall
    - provide the candidate with the copy of the specific instruction to candidate
    - allow each practical demonstration to be performed within two (2) hours including preparation of the materials
    - ensure that the candidate **FULLY** understands the instructions before proceeding to the performance of the assessment activity
    - allow fifteen (15) minutes for the candidate to familiarise themselves with the resources to be used during the practical demonstrations
    - ensure that the candidate is wearing appropriate personal protective equipment (PPE) before allowing them to proceed with the assessment activity
2. Assessment shall be based on the performance criteria in each of the units of competency. The evidence gathering method shall be comprised of:

    (a) Written Test (1 hour) – **knowledge evidence**

    (b) Practical Demonstration (4 hours) – **performance evidence**

    The practical demonstration activities will be divided into two (2) tasks:

    (i) Practical Demonstration 1 (2 hours)

    (ii) Practical Demonstration 2 (2 hours)
3. Final assessment is your responsibility as the accredit/certified assessor.
4. At the conclusion of each assessment activity, you will provide feedback to the candidate of the assessment result. The feedback will indicate whether the candidate is:

    ❑ **COMPETENT**

    ❑ **NOT YET COMPETENT**

5. The list of tools, equipment, machinery and materials to be provided for completion of the practical demonstration assessment activities can be found at:

   - Set A – Practical Demonstration 1 pages 49 - 50
   - Set A – Practical Demonstration 2: pages 56 - 57
   - Set B – Practical Demonstration 1: page 62
   - Set B – Practical Demonstration 2: pages 68 - 69
   - Set C – Practical Demonstration 1: pages 74 - 75
   - Set C – Practical Demonstration 2: pages 81 - 82

Specific Instructions to Candidate

You should respond to the assessment either in writing or verbally as agreed with the assessor. Written responses can be recorded in the spaces provided; if more space is required attach additional pages) or submit a word-processed document.

If you answer verbally, the assessor should record your answers in detail. Please check your recorded answers carefully and thoroughly to ensure that they are accurate.

You may also be undertaking observable activities (i.e. practical demonstration) that provide evidence of performance. The assessor must provide you with clear instructions on what is expected during this type of assessment and arrange a suitable time and location for demonstration of these skills.

To receive a satisfactory result for the assessments, you must complete all of the assessment activities; including questions, projects and tasks nominated by the assessor, to the required standard.

This assessment is based upon the units of competency in Masonry. Using the performance criteria as a benchmark, evidence will be gathered through:

1. Written Test (1 hour) – a variety of multiple-choice, true of false and short answer theory questions to support your competence with regard to the required knowledge (**knowledge evidence**).

2. Practical Demonstration (4 hours) – observable tasks outlined in the elements and performance criteria of the units of competency, completed to support a judgement of satisfactory performance to the required standard (**performance evidence**).

   There will be one (1) set of practical demonstration activities to complete. The assessor will direct you as to which 'set' you will be required to complete out of the following:

   - Set A:
     - construction of a 250 mm thick corner brick wall using English bond (2 hours)
     - surface plastering on the newly constructed corner brick wall (2 hours)
   - Set B:
     - construction of a 250 mm thick **T** (tee) brick wall using Flemish bond (2 hours)
     - surface plastering on the newly constructed **T** (tee) brick wall (2 hours)
   - Set C:
     - construction of a 125 mm thick **X** (cross) brick wall using Stretcher bond (2 hours)
     - surface plastering on the newly constructed **X** (cross) brick wall (2 hours)

3. The assessor will provide all necessary tools, equipment, machinery and materials required to complete each assessment activity.

4. These assessments cover all units of competency for Masonry.

5. The assessor will provide you with feedback of your performance after completion of each assessment activity. This feedback shall indicate whether you are:

   ❑ **COMPETENT**

   ❑ **NOT YET COMPETENT**

6. Complete of all assessment activities, to a satisfactory level, will contribute to a final assessment of competence.

Written Test

WRITTEN TEST - INSTRUCTIONS	
Candidate Name:	
Assessor Name:	
Qualification:	Certificate in Masonry
Unit of Competency	**Element**
Generic Competencies	
SEIP-CON-MAS-01-G	Perform computations using basic mathematical concepts
SEIP-CON-MAS-02-G	Apply occupational health and safety (OHS) practices in the workplace
SEIP-CON-MAS-03-G	Communicate in English in the workplace
SEIP-CON-MAS-04-G	Operate in a self-directed team
Sector-specific Competencies	
SEIP-CON-MAS-01-S	Translate drawings, plans and specifications
SEIP-CON-MAS-02-S	Work with hand tools and power tools
SEIP-CON-MAS-03-S	Carry-out measurements and calculations
Occupation-specific Competencies	
SEIP-CON-MAS-01-O	Make masonry mortar/stucco
SEIP-CON-MAS-02-O	Carry out pavement laying works
SEIP-CON-MAS-03-O	Pile structural bricks and blocks
SEIP-CON-MAS-04-O	Carry-out stone and brick works
SEIP-CON-MAS-05-O	Accomplish masonry surface plastering
SEIP-CON-MAS-06-O	Perform pattern stone finishing work
SEIP-CON-MAS-07-O	Perform wall panelling using bricks/stones
SEIP-CON-MAS-08-O	Apply waterproofing activities in construction
Assessment Centre:	
Date of Assessment:	
Time of Assessment:	
Instructions:	
Read and understand the directions carefully: ▪ this written examination is based on the performance criteria from all the units of competency in Masonry ▪ this assessment activity will be used to measure your underpinning knowledge ▪ write your answers on the paper provided ▪ answer all the questions as best as possible ▪ you have 1 (one) hour to complete this test	

WRITTEN TEST		
Multiple Choice		
This is a **multiple-choice** of test. Choose the appropriate answer and circle the letter that corresponds with your answer.		
1.	What percentage of 250 is 50?	a. 10% b. 20% c. 25% d. 50%
2.	What amount (percentage) of water by weight of cement is sufficient to give it necessary consistency for 1:4 mortars?	a.50% b. 60% c. 75% d. 100%
3.	What are the advantages of a self-directed team?	a. Improved quality, productivity and service b. Greater flexibility c. Prohibition signs d. Faster response to technological change e. All of the above
4.	A hacksaw blade consisting of 14 TPI it is suitable for cutting?	a. Machine steel b. Cast iron c. Bronze d. Conduit
5.	Which of line is used to show the visible shape of the object?	a. Chain line b. Object line c. Section line d. Extension line
6.	For cement mortar to lay bricks in foundations the ratio used is?	a. Cement to sand (1:2) b. Cement to sand (1:3) c. Cement to sand (1:4) d. Cement to sand (1:8)
7.	For plain cement, concrete works the ratio used is?	a. Cement to sand to chips (1:1:2) b. Cement to sand to chips (1:3:6) c. Cement to sand to chips (1:1.5:3) d. Cement to sand to chips (1:4:8)

8.	Reinforced cement concrete works with very thin components, the ratio of the ingredients used are?	a. Cement to sand to chips (1:1.5:3) b. Cement to sand to chips (1:3:6) c. Cement to sand to chips (1:2:4) d. Cement to sand to chips (1:4:8)
9.	Impact resulting from being struck by or against objects may cause what type of serious accidents?	a. Chemical hazards b. Physical hazards c. Biological hazards d. Ergonomics hazards
10.	Ways to build relationships within a team include?	a. Discuss team member work styles b. Define “team personality” c. Discuss individual goals, hopes, concerns d. All of the above
True of False Quiz		
Tick (√) the box corresponding to the correct answer.		
11.	The word “all right” indicates a positive response?	True ☐ False ☐
12.	Excessive noise can cause permanent hearing loss?	True ☐ False ☐
13.	Scaffolding is a permanent structure built for construction purposes?	True ☐ False ☐
Fill in the Missing Blanks		
Write the word or group of words needed to complete the following sentences.		
14.	_____ is used to protect eyes from flying particles and other debris which may cause personal injury to a worker.	
15.	To move or shift construction materials or items on the worksite, workers often use a piece of equipment that has one wheel and can be operated by a single person – this piece of equipment is known as a _____.	
Short Answer		
Write a short answer in the space provided (not to exceed more than approximately sixty (60) words).		
16.	What is pavement?	

17.	Why is cement used in construction work?	
18.	How many days do you need to keep the surface wet after completion of cement plastering?	
19.	What is the meaning of waterproofing?	
20.	Why is building layout important to masonry work?	

Feedback to candidate:

Assessment decision for this assessment activity:

☐ **Competent** ☐ **Not Yet Competent**

Candidate's Signature:		**Date:**	
Assessor' Signature:		**Date:**	

Written Test - Answers

Answers are highlighted in **bold** and *italics*.

Multiple Choice		
1.	What percentage of 250 is 50?	a. 10% ***b. 20%*** c. 25% d. 50%
2.	What amount (percentage) of water by weight of cement is sufficient to give it necessary consistency for 1:4 mortars?	a.50% b. 60% ***c. 75%*** d. 100%
3.	What are the advantages of a self-directed team?	a. Improved quality, productivity and service b. Greater flexibility c. Prohibition signs d. Faster response to technological change ***e. All of the above***
4.	A hacksaw blade consisting of 14 TPI it is suitable for cutting?	***a. Machine steel*** b. Cast iron c. Bronze d. Conduit
5.	Which of line is used to show the visible shape of the object?	a. Chain line ***b. Object line*** c. Section line d. Extension line
6.	For cement mortar to lay bricks in foundations the ratio used is?	a. Cement to sand (1:2) b. Cement to sand (1:3) ***c. Cement to sand (1:4)*** d. Cement to sand (1:8)
7.	For plain cement, concrete works the ratio used is?	a. Cement to sand to chips (1:1:2) ***b. Cement to sand to chips (1:3:6)*** c. Cement to sand to chips (1:1.5:3) d. Cement to sand to chips (1:4:8)

8.	Reinforced cement concrete works with very thin components, the ratio of the ingredients used are?	***a. Cement to sand to chips (1:1.5:3)*** b. Cement to sand to chips (1:3:6) c. Cement to sand to chips (1:2:4) d. Cement to sand to chips (1:4:8)
9.	Impact resulting from being struck by or against objects may cause what type of serious accidents?	a. Chemical hazards b. Physical hazards ***c. Biological hazards*** d. Ergonomics hazards
10.	Ways to build relationships within a team include?	a. Discuss team member work styles b. Define "team personality" c. Discuss individual goals, hopes, concerns ***d. All of the above***
True of False Quiz		
11.	The word "All right" indicates a positive response?	***True*** √ False ☐
12.	Excessive noise can cause permanent hearing loss?	***True*** √ False ☐
13.	Scaffolding is a permanent structure built for construction purposes?	True ☐ ***False*** √
Fill in the Missing Blanks		
14.	***Safety glasses or goggles (both are suitable answers)*** is used to protect eyes from flying particles and other debris which may cause personal injury to a worker.	
15.	To move or shift construction materials or items on the worksite, workers often use a piece of equipment that has one wheel and can be operated by a single person – this piece of equipment is known as a ***wheelbarrow***.	
Short Answer		
16.	What is pavement?	***A pavement is any surfaced construction used to carry foot or vehicle traffic.***
17.	Why is cement used in construction work?	***Cement is a binder substance used in construction which sets, hardens and adheres to other materials and binds them together.***
18.	How many days do you need to keep the surface wet after completion of cement plastering?	***After completion of plastering work, it is kept wet by sprinkling water on it for at least seven (7) days.***
19.	What is the meaning of waterproofing?	***Waterproofing is the treatment of a structure or surface to prevent the passage of liquid water under hydrostatic pressure.***

20.	Why is building layout important to masonry work?	***A building layout is important to masonry work to transfer the plan, length and width of its foundation on the ground. The foundation can be excavated for construction of a building as per the building layout.***

Set A: Practical Demonstration 1

PRACTICAL DEMONSTRATION 1	
Candidate Name:	
Assessor Name:	
Qualification:	Certificate in Masonry
Task:	Construction of 250 mm thick corner brick wall using English bond
Assessment Centre:	
Date of Assessment:	
Time of Assessment:	

Instructions:

Read and understand the directions carefully:

- this practical demonstration is based on the performance criteria from all or some of the units of competency in Masonry
- this assessment activity will be used to measure your underpinning skills
- you will have fifteen (15) minutes to familiarise yourself with the resources to be used
- you have two (2) hours to complete this demonstration

Procedure:

- observe and wear personal protective equipment (PPE) as required for the task to be performed
- read the specification information provided
- collect all materials needed to complete the task
- perform the task within the given time
- observe and follow all health and safety (OHS) requirements at all times

Job Specification Information:

1. Collect required tools, equipment, machinery and materials required for the task (refer to the list provided to you by the assessor).
2. Soak required numbers of bricks.
3. Prepare cement mortar with 1:6 ratio.
4. Set right angle using try square on a plain area.
5. Lay the bricks for first and second course with 12mm thick joints as per the drawing shown below.
6. Maintain straight-line using string, verticality using plumb bob and right angle using try square.
7. Rack out each of the joints.
8. Repeat the next courses following the first and second course.
9. Check the level using spirit level.
10. Report to the assessor for evaluation.
11. Clean tools, equipment, machinery and work area.
12. Dispose of waste materials and excess materials.

Drawing, Plan, Diagram or Sketch:

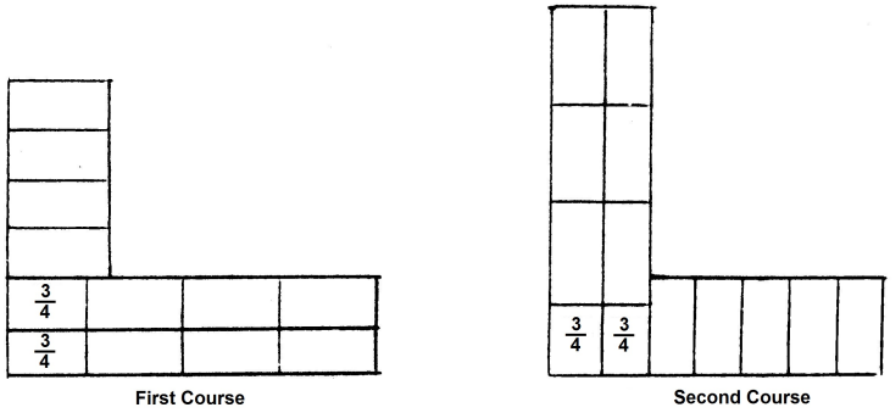
The diagram below is the blueprint of the task to be performed. During the construction process, you are to ensure:

- squareness
- level

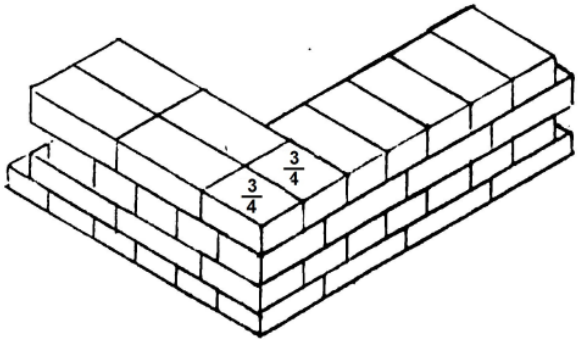
- perpend
- measurements

The corner brick wall must be of the following dimensions:

- length = 1000mm
- height = 600mm
- width = 250mm



First Course Second Course



250 mm X 250 mm Corner Wall

Resources Required:	
Tools:	Measuring tape Try square Brick hammer Trowel Shovel String Plumb bob Spirit level Steel pan Spade Bucket
Equipment:	Cement mixture machine Wheelbarrow
Machinery:	N/A
Materials:	Bricks Sand Cement

	Water
PPE:	Apron Mask Safety helmet Gloves (long) Safety shoes

Set A: Practical Demonstration 1 – Observation Checklist

PRACTICAL DEMONSTRATION 1 – OBSERVATION CHECKLIST	
Candidate Name:	
Assessor Name:	
Qualification:	Certificate in Masonry
Task:	Construction of 250mm thick corner brick wall using English bond
Assessment Centre:	
Date of Assessment:	
Instructions:	The tasks listed on the observation checklist of the practical demonstration will provide performance evidence of the candidate. Performance can be observed in an actual workplace or in a simulated working environment. If performance of particular tasks cannot be observed, you may ask the candidate to explain a procedure or enter into a discussion on the subject. The assessment activity (practical demonstration) should: ▪ fit industry requirements in which the assessment will be conducted ▪ adhere, where possible, to reasonable adjustment practices ▪ ensure that suitable performance benchmarks are applied and explained to the candidate

OBSERVATION RECORD		
Performance Criteria	Place a ✓ to show if evidence has been demonstrated competently	
	Yes	**No**
Identified and followed safety signs and symbols	☐	☐
Selected and used personal protective equipment (PPE)	☐	☐
Maintained personal hygiene	☐	☐
Applied first aid procedures during emergency situations	☐	☐
Identified and accesses appropriate manuals	☐	☐
Interpreted signs and symbols	☐	☐
Selected appropriate tools	☐	☐
Determined application of tools to job requirements	☐	☐
Identified, selected and prepared hand and power tools	☐	☐
Used appropriate hand and power tools for the job	☐	☐
Used hand tools properly and safely in accordance with manufacturer's specification	☐	☐
Used power tools properly and safely in accordance with manufacturer's specifications	☐	☐

Removed dust and foreign matter from power tools and instruments in accordance with standard operating procedure	☐	☐
Selected and prepared appropriate measuring device for the job	☐	☐
Checked and calibrated measuring instruments	☐	☐
Calculated material quantities	☐	☐
Interpreted and communicated results to appropriate authority	☐	☐
Prepared mortar mixing box/containment	☐	☐
Maintained and measured sand and cement ratio	☐	☐
Laid materials on mortar mixing box/containment as per instruction	☐	☐
Mixed sand, cement and water in accordance with specifications	☐	☐
Used appropriate transport to carry materials around with worksite	☐	☐
Located site for mixing of raw materials	☐	☐
Cut brick/paving tiles or blocks into specified sizes by power saw or paving tile cutters	☐	☐
Removed unnecessary materials from the base site	☐	☐
Built forms for pavement making in accordance with workplace requirements	☐	☐
Placed appropriate type of sand on the base in accordance with workplace requirements	☐	☐
Levelled and tampered base in accordance with workplace requirements	☐	☐
Set and aligned the paving line in the work site	☐	☐
Set up paving line and perpendicular lines at two ends of the line	☐	☐
Positioned and levelled paving bricks/blocks	☐	☐
Filled up gaps between blocks or bricks with appropriate fillers	☐	☐
Made final level check and correction, if necessary	☐	☐
Removed and cleaned unnecessary materials from blocks or bricks	☐	☐
Installed horizontal and vertical guide for brick and block	☐	☐
Installed lumber and form boards in accordance to building plan	☐	☐
Levelled from boards, as possible	☐	☐
Set width and depth of the footer in accordance to workplace specifications	☐	☐
Poured concrete mix or mortar into the form boards	☐	☐
Laid bricks and blocks on the line at minimum allowance of 1/16 inch and installed reinforcement bar	☐	☐

Spread and filled mortars on the base and gaps of bricks and blocks	☐	☐
Positioned and laid bricks and blocks	☐	☐
Spread 2 inches of mortar on the centre of the row of bricks and used brick trowel to separate mortar into 2 lines when laying bricks	☐	☐
Placed two mortar joint spacer on each side edge using centre of the masonry block or brick as reference point	☐	☐
Placed block or brick halfway onto the spacer and tapped until it seats firmly down	☐	☐
Checked the wall or structure regularly using plumb	☐	☐
Cleaned and soaked bricks/blocks in accordance with workplace specifications	☐	☐
Checked and segregated quality of bricks	☐	☐
Organised bricks/blocks at worksite in accordance to workplace requirements	☐	☐
Measured and marked centre lines of the brick/block work for construction as per drawing	☐	☐
Obtained level marks to set out complicated levels from given reference point	☐	☐
Obtained different levels of building structure by transferring from one point to the other using spirit level or dumpy level	☐	☐
Marked linear and angular measurements, as required	☐	☐
Took and checked offset measurements according drawing or instructions given	☐	☐
Established string lines using threads to facilitate trenching without disturbing the set marks	☐	☐
Laid and aligned bricks/blocks along the set out lines following specified bond patterns	☐	☐
Used brick closer and bats to various standard shapes and sizes, as required, when laying	☐	☐
Filled up brick joints with mortar/stucco for better adhesion	☐	☐
Aligned brick courses vertically and horizontally as per drawing plan	☐	☐
Racked out brick joints as per instruction	☐	☐
Applied appropriate lubricant after use and prior to storage	☐	☐
Sorted and cleaned tools and equipment	☐	☐
Cleaned work area	☐	☐
Disposed of waste materials in proper place	☐	☐
Feedback to candidate:		
Assessment decision for this assessment activity:		

☐ Competent		☐ Not Yet Competent	
Candidate's Signature:		**Date:**	
Assessor' Signature:		**Date:**	

Set A: Practical Demonstration 2

PRACTICAL DEMONSTRATION 2	
Candidate Name:	
Assessor Name:	
Qualification:	Certificate in Masonry
Task:	Perform surface plastering on corner brick wall
Assessment Centre:	
Date of Assessment:	
Time of Assessment:	

Instructions:

Read and understand the directions carefully:

- this practical demonstration is based on the performance criteria from all or some of the units of competency in Masonry
- this assessment activity will be used to measure your underpinning skills
- you will have fifteen (15) minutes to familiarise yourself with the resources to be used
- you have two (2) hours to complete this demonstration

Procedure:

- observe and wear personal protective equipment (PPE) as required for the task to be performed
- read the specification information provided
- collect all materials needed to complete the task
- perform the task within the given time
- observe and follow all health and safety (OHS) requirements at all times

Specification Information:

1. Collect required tools, equipment, machinery and materials required for the task (refer to the list provided to you by the assessor).
2. Remove all loose and foreign materials from surface.
3. Clean all joints and surfaces of wall with wire brush.
4. Wash the entire wall to be plastered.
5. Prepare cement mortar with 1:6 ratio.
6. Fix dots horizontally and then vertically on the entire wall surface.
7. Check vertical dots, one over the other, using plumb bob.
8. Form screeds between dots.
9. Apply first coat of plaster between spaces formed.
10. Level surface using flat wooden floats and straight edges.
11. Report to the assessor for evaluation.
12. Clean tools, equipment, machinery and work area.
13. Dispose of waste materials and excess materials.

Drawing, Plan, Diagram or Sketch:

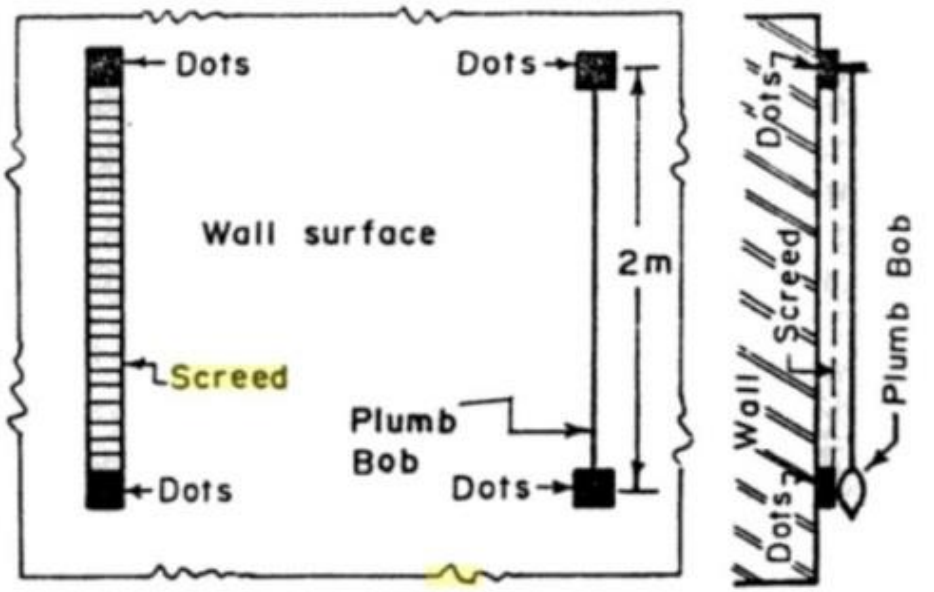
The diagram below is the blueprint of the task to be performed. During the construction process, you are to ensure:

- level

- smoothness
- thickness

The plastering of corner brick wall must be of the following dimensions (from previous practical demonstration task):

- length = 1000mm
- height = 600mm



DOTS AND SCREEDS.

Resources Required:	
Tools:	Measuring tape Try square Brick hammer Trowel Shovel String Plumb bob Spirit level Steel pan Spade Bucket Wire brush Flat wooden float Straight edge wooden float
Equipment:	Cement mixture machine Wheelbarrow
Machinery:	N/A
Materials:	Bricks Sand (0.20 m^3) Cement (0.25 bag)

	Water
PPE:	Apron Mask Safety helmet Gloves (long) Safety shoes

Set A: Practical Demonstration 2 – Observation Checklist

PRACTICAL DEMONSTRATION 2 – OBSERVATION CHECKLIST	
Candidate Name:	
Assessor Name:	
Qualification:	Certificate in Masonry
Task:	Perform surface plastering on corner brick wall
Assessment Centre:	
Date of Assessment:	
Instructions:	The tasks listed on the observation checklist of the practical demonstration will provide performance evidence of the candidate. Performance can be observed in an actual workplace or in a simulated working environment. If performance of particular tasks cannot be observed, you may ask the candidate to explain a procedure or enter into a discussion on the subject. The assessment activity (practical demonstration) should: ▪ fit industry requirements in which the assessment will be conducted ▪ adhere, where possible, to reasonable adjustment practices ▪ ensure that suitable performance benchmarks are applied and explained to the candidate

OBSERVATION RECORD		
Performance Criteria	Place a ✓ to show if evidence has been demonstrated competently	
	Yes	**No**
Identified and followed safety signs and symbols	☐	☐
Selected and used personal protective equipment (PPE)	☐	☐
Maintained personal hygiene	☐	☐
Applied first aid procedures during emergency situations	☐	☐
Identified and accesses appropriate manuals	☐	☐
Interpreted signs and symbols	☐	☐
Determined application of tools to job requirements	☐	☐
Identified, selected and prepared hand and power tools	☐	☐
Used appropriate hand and power tools for the job	☐	☐
Used hand tools properly and safely in accordance with manufacturer's specification	☐	☐
Used power tools properly and safely in accordance with manufacturer's specifications	☐	☐
Removed dust and foreign matter from power tools and instruments in accordance with standard operating procedure	☐	☐

Selected and prepared appropriate measuring device for the job	☐	☐
Calculated material quantities	☐	☐
Interpreted and communicated results to appropriate authority	☐	☐
Checked and calibrated measuring instruments	☐	☐
Maintained and measured sand and cement ratio	☐	☐
Laid materials on mortar mixing box/containment as per instruction	☐	☐
Mixed sand, cement and water in accordance with specifications	☐	☐
Used appropriate transport to carry materials around the worksite	☐	☐
Prepared scaffolding, if and as required	☐	☐
Performed racking out of joints and chipping as required	☐	☐
Cleaned and washed surface for plastering	☐	☐
Separated foreign materials and larger particles from sand with the help of sieve/screen	☐	☐
Measured required quantities of sand and kept them in a dry place	☐	☐
Spread cement on sand with the right quantity in accordance with specifications	☐	☐
Mixed cement and sand until the mixture is uniform	☐	☐
Added and mixed water gradually to form the specified consistency	☐	☐
Applied mortar on masonry surface	☐	☐
Checked surface level using appropriate levelling tools	☐	☐
Scratched and repeated uneven surface while plaster still soft	☐	☐
Used wooden trowel and wetted foam to finish the surface	☐	☐
Gathered corner plastering tools	☐	☐
Applied enough amount of plaster to corner area	☐	☐
Set corner initially using a flat trowel	☐	☐
Checked alignment, perpendicularity, angularity and adjusted where necessary	☐	☐
Made repairs to damaged areas	☐	☐
Prepared substrates to be waterproofed	☐	☐
Prime coated substrates with waterproofing material	☐	☐
Prepared waterproofing membrane for installation	☐	☐
Mixed or prepared waterproofing	☐	☐
Applied waterproofing materials	☐	☐
Applied appropriate lubricant after use and prior to storage	☐	☐
Cleaned and sorted tools and equipment	☐	☐

Cleaned work area	☐	☐
Disposed waste materials in proper place	☐	☐
Feedback to candidate:		
Assessment decision for this assessment activity: ☐ **Competent** ☐ **Not Yet Competent**		

Candidate's Signature:		**Date:**	
Assessor' Signature:		**Date:**	

Set B: Practical Demonstration 1

PRACTICAL DEMONSTRATION 1	
Candidate Name:	
Assessor Name:	
Qualification:	Certificate in Masonry
Task:	Construction of 250 mm thick **T** (tee) brick wall using Flemish bond
Assessment Centre:	
Date of Assessment:	
Time of Assessment:	

Instructions:

Read and understand the directions carefully:

- this practical demonstration is based on the performance criteria from all or some of the units of competency in Masonry
- this assessment activity will be used to measure your underpinning skills
- you will have fifteen (15) minutes to familiarise yourself with the resources to be used
- you have two (2) hours to complete this demonstration

Procedure:

- observe and wear personal protective equipment (PPE) as required for the task to be performed
- read the specification information provided
- collect all materials needed to complete the task
- perform the task within the given time
- observe and follow all health and safety (OHS) requirements at all times

Job Specification Information:

1. Collect required tools and equipment to construct 250mm thick **T** (tee) brick wall.
2. Collect brick, sand and cement.
3. Soak required number of bricks.
4. Prepare cement mortar with 1:6 proportions.
5. Set right angle using try square on a plain area.
6. Lay the bricks for first and second course with 12mm thick joints as per the drawing shown below.
7. Maintain the right-angle using string, verticality using plumb bob.
8. Rack out each of the joints.
9. Repeat the next courses following the first and second course.
10. Check the level using spirit level.
11. Report to the assessor for evaluation.
12. Clean tools, equipment, machinery and work area.
13. Dispose of waste materials and excess materials.

Drawing, Plan, Diagram or Sketch:

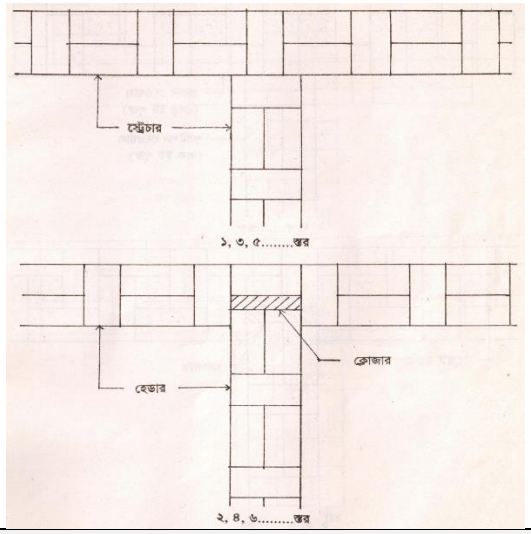
The diagram below is the blueprint of the task to be performed. During the construction process, you are to ensure:

- squareness
- level

- perpend
- measurements

The corner brick wall must be of the following dimensions:

- length = 100 cm
- height = 60 cm
- width = 25 cm
- maintain the Flemish bond



Resources Required:	
Tools:	Measuring tape Try square Brick hammer Trowel Shovel String line Plumb bob Spirit level Spade Bucket Mug
Equipment:	Cement mixture machine Wheelbarrow
Machinery:	N/A
Materials:	Bricks Sand Cement Water
PPE:	Apron Mask Safety helmet Gloves (long) Safety shoes

Set B: Practical Demonstration 1 – Observation Checklist

PRACTICAL DEMONSTRATION 1 – OBSERVATION CHECKLIST	
Candidate Name:	
Assessor Name:	
Qualification:	Certificate in Masonry
Task:	Construction of 250 mm thick **T** (tee) brick wall using Flemish bond
Assessment Centre:	
Date of Assessment:	
Instructions:	The tasks listed on the observation checklist of the practical demonstration will provide performance evidence of the candidate. Performance can be observed in an actual workplace or in a simulated working environment. If performance of particular tasks cannot be observed, you may ask the candidate to explain a procedure or enter into a discussion on the subject. The assessment activity (practical demonstration) should: ▪ fit industry requirements in which the assessment will be conducted ▪ adhere, where possible, to reasonable adjustment practices ▪ ensure that suitable performance benchmarks are applied and explained to the candidate

OBSERVATION RECORD		
Performance Criteria	Place a ✓ to show if evidence has been demonstrated competently	
	Yes	**No**
Identified and followed safety signs and symbols	☐	☐
Selected and used personal protective equipment (PPE)	☐	☐
Maintained personal hygiene	☐	☐
Applied first aid procedures during emergency situations	☐	☐
Identified and accesses appropriate manuals	☐	☐
Interpreted signs and symbols	☐	☐
Selected appropriate tools	☐	☐
Determined application of tools to job requirements	☐	☐
Identified, selected and prepared hand and power tools	☐	☐
Used appropriate hand and power tools for the job	☐	☐
Used hand tools properly and safely in accordance with manufacturer's specification	☐	☐
Used power tools properly and safely in accordance with manufacturer's specifications	☐	☐

Removed dust and foreign matter from power tools and instruments in accordance with standard operating procedure	☐	☐
Selected and prepared appropriate measuring device for the job	☐	☐
Checked and calibrated measuring instruments	☐	☐
Calculated material quantities	☐	☐
Interpreted and communicated results to appropriate authority	☐	☐
Prepared mortar mixing box/containment	☐	☐
Maintained and measured sand and cement ratio	☐	☐
Laid materials on mortar mixing box/containment as per instruction	☐	☐
Mixed sand, cement and water in accordance with specifications	☐	☐
Used appropriate transport to carry materials around with worksite	☐	☐
Located site for mixing of raw materials	☐	☐
Cut brick/paving tiles or blocks into specified sizes by power saw or paving tile cutters	☐	☐
Removed unnecessary materials from the base site	☐	☐
Built forms for pavement making in accordance with workplace requirements	☐	☐
Placed appropriate type of sand on the base in accordance with workplace requirements	☐	☐
Levelled and tampered base in accordance with workplace requirements	☐	☐
Set and aligned the paving line in the work site	☐	☐
Set up paving line and perpendicular lines at two ends of the line	☐	☐
Positioned and levelled paving bricks/blocks	☐	☐
Filled up gaps between blocks or bricks with appropriate fillers	☐	☐
Made final level check and correction, if necessary	☐	☐
Removed and cleaned unnecessary materials from blocks or bricks	☐	☐
Installed horizontal and vertical guide for brick and block	☐	☐
Installed lumber and form boards in accordance to building plan	☐	☐
Levelled from boards, as possible	☐	☐
Set width and depth of the footer in accordance to workplace specifications	☐	☐
Poured concrete mix or mortar into the form boards	☐	☐
Laid bricks and blocks on the line at minimum allowance of 1/16 inch and installed reinforcement bar	☐	☐

Spread and filled mortars on the base and gaps of bricks and blocks	☐	☐
Positioned and laid bricks and blocks	☐	☐
Spread 2 inches of mortar on the centre of the row of bricks and used brick trowel to separate mortar into 2 lines when laying bricks	☐	☐
Placed two mortar joint spacer on each side edge using centre of the masonry block or brick as reference point	☐	☐
Placed block or brick halfway onto the spacer and tapped until it seats firmly down	☐	☐
Checked the wall or structure regularly using plumb	☐	☐
Cleaned and soaked bricks/blocks in accordance with workplace specifications	☐	☐
Checked and segregated quality of bricks	☐	☐
Organised bricks/blocks at worksite in accordance to workplace requirements	☐	☐
Measured and marked centre lines of the brick/block work for construction as per drawing	☐	☐
Obtained level marks to set out complicated levels from given reference point	☐	☐
Obtained different levels of building structure by transferring from one point to the other using spirit level or dumpy level	☐	☐
Marked linear and angular measurements, as required	☐	☐
Took and checked offset measurements according drawing or instructions given	☐	☐
Established string lines using threads to facilitate trenching without disturbing the set marks	☐	☐
Laid and aligned bricks/blocks along the set-out lines following specified bond patterns	☐	☐
Used brick closer and bats to various standard shapes and sizes, as required, when laying	☐	☐
Filled up brick joints with mortar/stucco for better adhesion	☐	☐
Aligned brick courses vertically and horizontally as per drawing plan	☐	☐
Racked out brick joints as per instruction	☐	☐
Applied appropriate lubricant after use and prior to storage	☐	☐
Sorted and cleaned tools and equipment	☐	☐
Cleaned work area	☐	☐
Disposed of waste materials in proper place	☐	☐
Feedback to candidate:		
Assessment decision for this assessment activity:		

☐ Competent		☐ Not Yet Competent	
Candidate's Signature:		**Date:**	
Assessor' Signature:		**Date:**	

Set B: Practical Demonstration 2

PRACTICAL DEMONSTRATION 2	
Candidate Name:	
Assessor Name:	
Qualification:	Certificate in Masonry
Task:	Perform surface plastering on **T** (tee) brick wall
Assessment Centre:	
Date of Assessment:	
Time of Assessment:	

Instructions:

Read and understand the directions carefully:

- this practical demonstration is based on the performance criteria from all or some of the units of competency in Masonry
- this assessment activity will be used to measure your underpinning skills
- you will have fifteen (15) minutes to familiarise yourself with the resources to be used
- you have two (2) hours to complete this demonstration

Procedure:

- observe and wear personal protective equipment (PPE) as required for the task to be performed
- read the specification information provided
- collect all materials needed to complete the task
- perform the task within the given time
- observe and follow all health and safety (OHS) requirements at all times

Specification Information:

1. Collect required tools, equipment, machinery and materials required for the task (refer to the list provided to you by the assessor).
2. Remove all loose and foreign materials from surface.
3. Clean all joints and surfaces of wall with wire brush.
4. Wash the entire wall to be plastered.
5. Prepare cement mortar with 1:6 ratio.
6. Fix dots horizontally and then vertically on the entire wall surface.
7. Check vertical dots, one over the other, using plumb bob.
8. Form screeds between dots.
9. Apply first coat of plaster between spaces formed.
10. Level surface using flat wooden floats and straight edges.
11. Report to the assessor for evaluation.
12. Clean tools, equipment, machinery and work area.
13. Dispose of waste materials and excess materials.

Drawing, Plan, Diagram or Sketch:

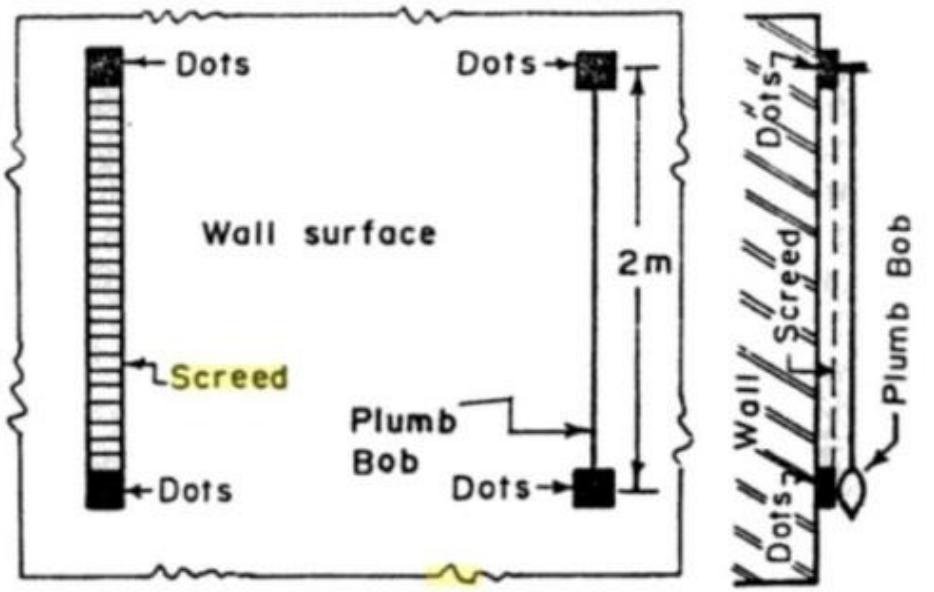
The diagram below is the blueprint of the task to be performed. During the construction process, you are to ensure:

- level

- smoothness
- thickness

The plastering of corner brick wall must be of the following dimensions (from previous practical demonstration task):

- length = 100 cm
- height = 60 cm



DOTS AND SCREEDS.

Resources Required:	
Tools:	Measuring tape Try square Brick hammer Trowel Shovel String Plumb bob Spirit level Steel pan Spade Bucket Wire brush Flat wooden float Straight edge wooden float
Equipment:	Cement mixture machine Wheelbarrow
Machinery:	N/A
Materials:	Bricks Sand (0.20 m^3) Cement (0.25 bag)

	Water
PPE:	Apron Mask Safety helmet Gloves (long) Safety shoes

Set B: Practical Demonstration 2 – Observation Checklist

PRACTICAL DEMONSTRATION 2 – OBSERVATION CHECKLIST	
Candidate Name:	
Assessor Name:	
Qualification:	Certificate in Masonry
Task:	Perform surface plastering on **T** (tee) brick wall
Assessment Centre:	
Date of Assessment:	
Instructions:	The tasks listed on the observation checklist of the practical demonstration will provide performance evidence of the candidate. Performance can be observed in an actual workplace or in a simulated working environment. If performance of particular tasks cannot be observed, you may ask the candidate to explain a procedure or enter into a discussion on the subject. The assessment activity (practical demonstration) should: ▪ fit industry requirements in which the assessment will be conducted ▪ adhere, where possible, to reasonable adjustment practices ▪ ensure that suitable performance benchmarks are applied and explained to the candidate

OBSERVATION RECORD		
Performance Criteria	Place a ✓ to show if evidence has been demonstrated competently	
	Yes	**No**
Identified and followed safety signs and symbols	☐	☐
Selected and used personal protective equipment (PPE)	☐	☐
Maintained personal hygiene	☐	☐
Applied first aid procedures during emergency situations	☐	☐
Identified and accesses appropriate manuals	☐	☐
Interpreted signs and symbols	☐	☐
Determined application of tools to job requirements	☐	☐
Identified, selected and prepared hand and power tools	☐	☐
Used appropriate hand and power tools for the job	☐	☐
Used hand tools properly and safely in accordance with manufacturer's specification	☐	☐
Used power tools properly and safely in accordance with manufacturer's specifications	☐	☐
Removed dust and foreign matter from power tools and instruments in accordance with standard operating procedure	☐	☐

Selected and prepared appropriate measuring device for the job	☐	☐
Calculated material quantities	☐	☐
Interpreted and communicated results to appropriate authority	☐	☐
Checked and calibrated measuring instruments	☐	☐
Maintained and measured sand and cement ratio	☐	☐
Laid materials on mortar mixing box/containment as per instruction	☐	☐
Mixed sand, cement and water in accordance with specifications	☐	☐
Used appropriate transport to carry materials around the worksite	☐	☐
Prepared scaffolding, if and as required	☐	☐
Performed racking out of joints and chipping as required	☐	☐
Cleaned and washed surface for plastering	☐	☐
Separated foreign materials and larger particles from sand with the help of sieve/screen	☐	☐
Measured required quantities of sand and kept them in a dry place	☐	☐
Spread cement on sand with the right quantity in accordance with specifications	☐	☐
Mixed cement and sand until the mixture is uniform	☐	☐
Added and mixed water gradually to form the specified consistency	☐	☐
Applied mortar on masonry surface	☐	☐
Checked surface level using appropriate levelling tools	☐	☐
Scratched and repeated uneven surface while plaster still soft	☐	☐
Used wooden trowel and wetted foam to finish the surface	☐	☐
Gathered corner plastering tools	☐	☐
Applied enough amount of plaster to corner area	☐	☐
Set corner initially using a flat trowel	☐	☐
Checked alignment, perpendicularity, angularity and adjusted where necessary	☐	☐
Made repairs to damaged areas	☐	☐
Prepared substrates to be waterproofed	☐	☐
Prime coated substrates with waterproofing material	☐	☐
Prepared waterproofing membrane for installation	☐	☐
Mixed or prepared waterproofing	☐	☐
Applied waterproofing materials	☐	☐
Applied appropriate lubricant after use and prior to storage	☐	☐
Cleaned and sorted tools and equipment	☐	☐

Cleaned work area	☐	☐
Disposed waste materials in proper place	☐	☐
Feedback to candidate:		
Assessment decision for this assessment activity: ☐ **Competent** ☐ **Not Yet Competent**		

Candidate's Signature:		**Date:**	
Assessor' Signature:		**Date:**	

Set C: Practical Demonstration 1

PRACTICAL DEMONSTRATION 1	
Candidate Name:	
Assessor Name:	
Qualification:	Certificate in Masonry
Task:	Construction of 125 mm thick **X** (cross) brick wall using Stretcher bond
Assessment Centre:	
Date of Assessment:	
Time of Assessment:	

Instructions:

Read and understand the directions carefully:

- this practical demonstration is based on the performance criteria from all or some of the units of competency in Masonry
- this assessment activity will be used to measure your underpinning skills
- you will have fifteen (15) minutes to familiarise yourself with the resources to be used
- you have two (2) hours to complete this demonstration

Procedure:

- observe and wear personal protective equipment (PPE) as required for the task to be performed
- read the specification information provided
- collect all materials needed to complete the task
- perform the task within the given time
- observe and follow all health and safety (OHS) requirements at all times

Job Specification Information:

1. Collect required tools and equipment to construct 125 mm thick **X** (cross) brick wall.
2. Collect brick, sand and cement.
3. Soak required number of bricks.
4. Prepare cement mortar with 1:4 proportions.
5. Set right angle using try square on a plain area.
6. Lay the bricks for first and second course with 12mm thick joints as per the drawing shown below.
7. Maintain the straight-line using string and vertically using plumb bob.
8. Maintain the right angle using Try square and level using spirit level.
9. Rack out each of the joints.
10. Repeat the next courses following the odd and even course.
11. Report to the assessor for evaluation.
12. Clean tools, equipment, machinery and work area.
13. Dispose of waste materials and excess materials.

Drawing, Plan, Diagram or Sketch:

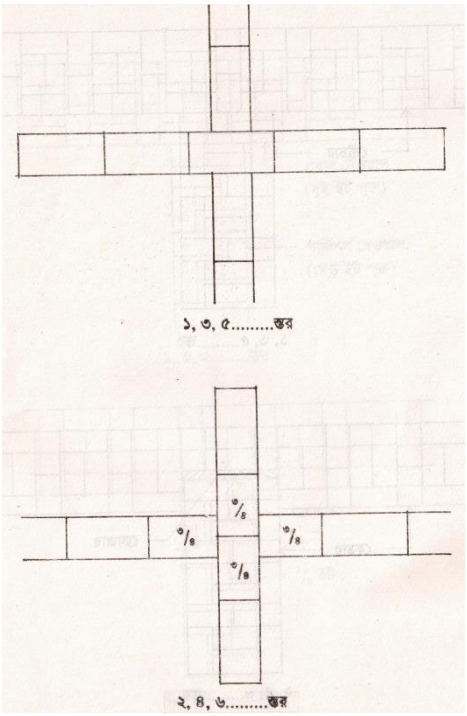
The diagram below is the blueprint of the task to be performed. During the construction process, you are to ensure:

- squareness
- level

- perpend
- measurements

The corner brick wall must be of the following dimensions:

- length of the walls = 1.0 m in each side
- height of the walls = 75 cm
- width of the walls = 12.5 cm
- maintain the Stretcher bond



Resources Required:	
Tools:	Measuring tape Try square Brick hammer Trowel Shovel String line Plumb bob Spirit level Spade Bucket Mug
Equipment:	Cement mixture machine Wheelbarrow
Machinery:	N/A
Materials:	Bricks Sand Cement Water

PPE:	Apron Mask Safety helmet Gloves (long) Safety shoes

Set C: Practical Demonstration 1 – Observation Checklist

PRACTICAL DEMONSTRATION 1 – OBSERVATION CHECKLIST	
Candidate Name:	
Assessor Name:	
Qualification:	Certificate in Masonry
Task:	Construction of 125 mm thick **X** (cross) brick wall using Stretcher bond
Assessment Centre:	
Date of Assessment:	
Instructions:	The tasks listed on the observation checklist of the practical demonstration will provide performance evidence of the candidate. Performance can be observed in an actual workplace or in a simulated working environment. If performance of particular tasks cannot be observed, you may ask the candidate to explain a procedure or enter into a discussion on the subject. The assessment activity (practical demonstration) should: ▪ fit industry requirements in which the assessment will be conducted ▪ adhere, where possible, to reasonable adjustment practices ▪ ensure that suitable performance benchmarks are applied and explained to the candidate

OBSERVATION RECORD		
Performance Criteria	Place a ✓ to show if evidence has been demonstrated competently	
	Yes	**No**
Identified and followed safety signs and symbols	☐	☐
Selected and used personal protective equipment (PPE)	☐	☐
Maintained personal hygiene	☐	☐
Applied first aid procedures during emergency situations	☐	☐
Identified and accesses appropriate manuals	☐	☐
Interpreted signs and symbols	☐	☐
Selected appropriate tools	☐	☐
Determined application of tools to job requirements	☐	☐
Identified, selected and prepared hand and power tools	☐	☐
Used appropriate hand and power tools for the job	☐	☐
Used hand tools properly and safely in accordance with manufacturer's specification	☐	☐
Used power tools properly and safely in accordance with manufacturer's specifications	☐	☐

Removed dust and foreign matter from power tools and instruments in accordance with standard operating procedure	☐	☐
Selected and prepared appropriate measuring device for the job	☐	☐
Checked and calibrated measuring instruments	☐	☐
Calculated material quantities	☐	☐
Interpreted and communicated results to appropriate authority	☐	☐
Prepared mortar mixing box/containment	☐	☐
Maintained and measured sand and cement ratio	☐	☐
Laid materials on mortar mixing box/containment as per instruction	☐	☐
Mixed sand, cement and water in accordance with specifications	☐	☐
Used appropriate transport to carry materials around with worksite	☐	☐
Located site for mixing of raw materials	☐	☐
Cut brick/paving tiles or blocks into specified sizes by power saw or paving tile cutters	☐	☐
Removed unnecessary materials from the base site	☐	☐
Built forms for pavement making in accordance with workplace requirements	☐	☐
Placed appropriate type of sand on the base in accordance with workplace requirements	☐	☐
Levelled and tampered base in accordance with workplace requirements	☐	☐
Set and aligned the paving line in the work site	☐	☐
Set up paving line and perpendicular lines at two ends of the line	☐	☐
Positioned and levelled paving bricks/blocks	☐	☐
Filled up gaps between blocks or bricks with appropriate fillers	☐	☐
Made final level check and correction, if necessary	☐	☐
Removed and cleaned unnecessary materials from blocks or bricks	☐	☐
Installed horizontal and vertical guide for brick and block	☐	☐
Installed lumber and form boards in accordance to building plan	☐	☐
Levelled from boards, as possible	☐	☐
Set width and depth of the footer in accordance to workplace specifications	☐	☐
Poured concrete mix or mortar into the form boards	☐	☐
Laid bricks and blocks on the line at minimum allowance of 1/16 inch and installed reinforcement bar	☐	☐

Spread and filled mortars on the base and gaps of bricks and blocks	☐	☐
Positioned and laid bricks and blocks	☐	☐
Spread 2 inches of mortar on the centre of the row of bricks and used brick trowel to separate mortar into 2 lines when laying bricks	☐	☐
Placed two mortar joint spacer on each side edge using centre of the masonry block or brick as reference point	☐	☐
Placed block or brick halfway onto the spacer and tapped until it seats firmly down	☐	☐
Checked the wall or structure regularly using plumb	☐	☐
Cleaned and soaked bricks/blocks in accordance with workplace specifications	☐	☐
Checked and segregated quality of bricks	☐	☐
Organised bricks/blocks at worksite in accordance to workplace requirements	☐	☐
Measured and marked centre lines of the brick/block work for construction as per drawing	☐	☐
Obtained level marks to set out complicated levels from given reference point	☐	☐
Obtained different levels of building structure by transferring from one point to the other using spirit level or dumpy level	☐	☐
Marked linear and angular measurements, as required	☐	☐
Took and checked offset measurements according drawing or instructions given	☐	☐
Established string lines using threads to facilitate trenching without disturbing the set marks	☐	☐
Laid and aligned bricks/blocks along the set-out lines following specified bond patterns	☐	☐
Used brick closer and bats to various standard shapes and sizes, as required, when laying	☐	☐
Filled up brick joints with mortar/stucco for better adhesion	☐	☐
Aligned brick courses vertically and horizontally as per drawing plan	☐	☐
Racked out brick joints as per instruction	☐	☐
Applied appropriate lubricant after use and prior to storage	☐	☐
Sorted and cleaned tools and equipment	☐	☐
Cleaned work area	☐	☐
Disposed of waste materials in proper place	☐	☐
Feedback to candidate:		
Assessment decision for this assessment activity:		

☐ Competent		☐ Not Yet Competent	
Candidate's Signature:		**Date:**	
Assessor' Signature:		**Date:**	

Set C: Practical Demonstration 2

PRACTICAL DEMONSTRATION 2	
Candidate Name:	
Assessor Name:	
Qualification:	Certificate in Masonry
Task:	Perform surface plastering on **X** (cross) brick wall
Assessment Centre:	
Date of Assessment:	
Time of Assessment:	

Instructions:

Read and understand the directions carefully:

- this practical demonstration is based on the performance criteria from all or some of the units of competency in Masonry
- this assessment activity will be used to measure your underpinning skills
- you will have fifteen (15) minutes to familiarise yourself with the resources to be used
- you have two (2) hours to complete this demonstration

Procedure:

- observe and wear personal protective equipment (PPE) as required for the task to be performed
- read the specification information provided
- collect all materials needed to complete the task
- perform the task within the given time
- observe and follow all health and safety (OHS) requirements at all times

Specification Information:

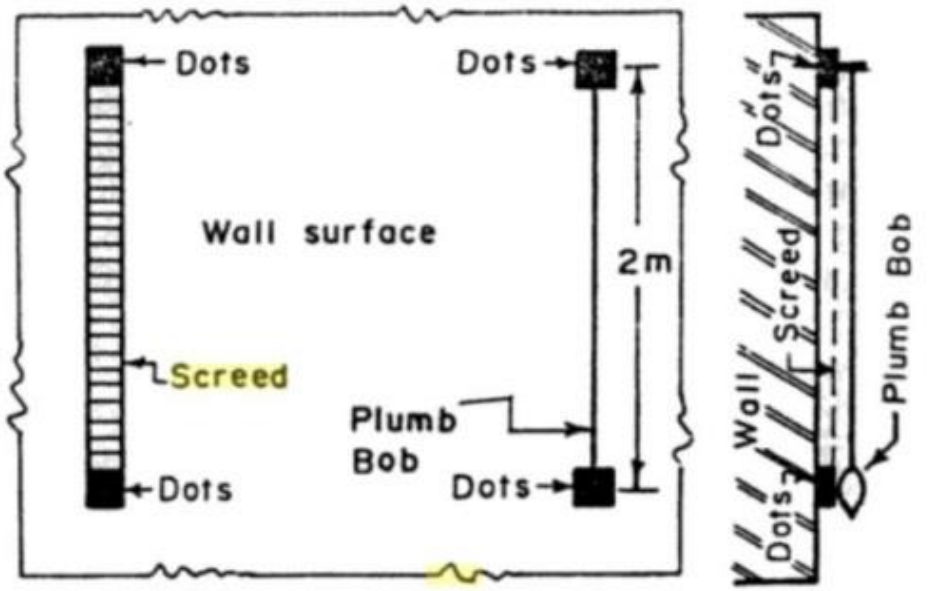
1. Collect required tools, equipment, machinery and materials required for the task (refer to the list provided to you by the assessor).
2. Remove all loose and foreign materials from surface.
3. Clean all joints and surfaces of wall with wire brush.
4. Wash the entire wall to be plastered.
5. Prepare cement mortar with 1:6 ratio.
6. Fix dots horizontally and then vertically on the entire wall surface.
7. Check vertical dots, one over the other, using plumb bob.
8. Form screeds between dots.
9. Apply first coat of plaster between spaces formed.
10. Level surface using flat wooden floats and straight edges.
11. Report to the assessor for evaluation.
12. Clean tools, equipment, machinery and work area.
13. Dispose of waste materials and excess materials.

Drawing, Plan, Diagram or Sketch:

The diagram below is the blueprint of the task to be performed. During the construction process, you are to ensure:

- level

- smoothness
- thickness



DOTS AND SCREEDS.

Resources Required:	
Tools:	Measuring tape Try square Brick hammer Trowel Shovel String Plumb bob Spirit level Steel pan Spade Bucket Wire brush Flat wooden float Straight edge wooden float
Equipment:	Cement mixture machine Wheelbarrow
Machinery:	N/A
Materials:	Bricks Sand (0.20 m^3) Cement (0.25 bag) Water
PPE:	Apron Mask Safety helmet

	Gloves (long) Safety shoes

Set C: Practical Demonstration 2 – Observation Checklist

PRACTICAL DEMONSTRATION 2 – OBSERVATION CHECKLIST	
Candidate Name:	
Assessor Name:	
Qualification:	Certificate in Masonry
Task:	Perform surface plastering on **X** (cross) brick wall
Assessment Centre:	
Date of Assessment:	
Instructions:	The tasks listed on the observation checklist of the practical demonstration will provide performance evidence of the candidate. Performance can be observed in an actual workplace or in a simulated working environment. If performance of particular tasks cannot be observed, you may ask the candidate to explain a procedure or enter into a discussion on the subject. The assessment activity (practical demonstration) should: ▪ fit industry requirements in which the assessment will be conducted ▪ adhere, where possible, to reasonable adjustment practices ▪ ensure that suitable performance benchmarks are applied and explained to the candidate

OBSERVATION RECORD		
Performance Criteria	Place a ✓ to show if evidence has been demonstrated competently	
	Yes	**No**
Identified and followed safety signs and symbols	☐	☐
Selected and used personal protective equipment (PPE)	☐	☐
Maintained personal hygiene	☐	☐
Applied first aid procedures during emergency situations	☐	☐
Identified and accesses appropriate manuals	☐	☐
Interpreted signs and symbols	☐	☐
Determined application of tools to job requirements	☐	☐
Identified, selected and prepared hand and power tools	☐	☐
Used appropriate hand and power tools for the job	☐	☐
Used hand tools properly and safely in accordance with manufacturer's specification	☐	☐
Used power tools properly and safely in accordance with manufacturer's specifications	☐	☐

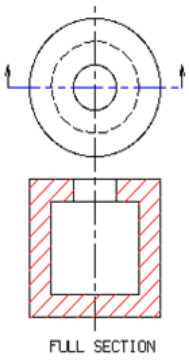
Removed dust and foreign matter from power tools and instruments in accordance with standard operating procedure	☐	☐
Selected and prepared appropriate measuring device for the job	☐	☐
Calculated material quantities	☐	☐
Interpreted and communicated results to appropriate authority	☐	☐
Checked and calibrated measuring instruments	☐	☐
Maintained and measured sand and cement ratio	☐	☐
Laid materials on mortar mixing box/containment as per instruction	☐	☐
Mixed sand, cement and water in accordance with specifications	☐	☐
Used appropriate transport to carry materials around the worksite	☐	☐
Prepared scaffolding, if and as required	☐	☐
Performed racking out of joints and chipping as required	☐	☐
Cleaned and washed surface for plastering	☐	☐
Separated foreign materials and larger particles from sand with the help of sieve/screen	☐	☐
Measured required quantities of sand and kept them in a dry place	☐	☐
Spread cement on sand with the right quantity in accordance with specifications	☐	☐
Mixed cement and sand until the mixture is uniform	☐	☐
Added and mixed water gradually to form the specified consistency	☐	☐
Applied mortar on masonry surface	☐	☐
Checked surface level using appropriate levelling tools	☐	☐
Scratched and repeated uneven surface while plaster still soft	☐	☐
Used wooden trowel and wetted foam to finish the surface	☐	☐
Gathered corner plastering tools	☐	☐
Applied enough amount of plaster to corner area	☐	☐
Set corner initially using a flat trowel	☐	☐
Checked alignment, perpendicularity, angularity and adjusted where necessary	☐	☐
Made repairs to damaged areas	☐	☐
Prepared substrates to be waterproofed	☐	☐
Prime coated substrates with waterproofing material	☐	☐
Prepared waterproofing membrane for installation	☐	☐
Mixed or prepared waterproofing	☐	☐
Applied waterproofing materials	☐	☐
Applied appropriate lubricant after use and prior to storage	☐	☐

Cleaned and sorted tools and equipment	☐	☐
Cleaned work area	☐	☐
Disposed waste materials in proper place	☐	☐
Feedback to candidate:		
Assessment decision for this assessment activity: **☐ Competent** **☐ Not Yet Competent**		

Candidate's Signature:		**Date:**	
Assessor' Signature:		**Date:**	

Oral Questions (Optional)

ORAL QUESTIONS - INSTRUCTIONS	
Candidate Name:	
Assessor Name:	
Qualification:	Certificate in Masonry
Unit of Competency	
Generic Competencies	
SEIP-CON-MAS-01-G	Perform computations using basic mathematical concepts
SEIP-CON-MAS-02-G	Apply occupational health and safety (OHS) practices in the workplace
SEIP-CON-MAS-03-G	Communicate in English in the workplace
SEIP-CON-MAS-04-G	Operate in a self-directed team
Sector-specific Competencies	
SEIP-CON-MAS-01-S	Translate drawings, plans and specifications
SEIP-CON-MAS-02-S	Work with hand tools and power tools
SEIP-CON-MAS-03-S	Carry-out measurements and calculations
Occupation-specific Competencies	
SEIP-CON-MAS-01-O	Make masonry mortar/stucco
SEIP-CON-MAS-02-O	Carry out pavement laying works
SEIP-CON-MAS-03-O	Pile structural bricks and blocks
SEIP-CON-MAS-04-O	Carry-out stone and brick works
SEIP-CON-MAS-05-O	Accomplish masonry surface plastering
SEIP-CON-MAS-06-O	Perform pattern stone finishing work
SEIP-CON-MAS-07-O	Perform wall panelling using bricks/stones
SEIP-CON-MAS-08-O	Apply waterproofing activities in construction
Assessment Centre:	
Date of Assessment:	
Time of Assessment:	
Instructions:	
Read and understand the directions carefully: ▪ these oral questions are based on the performance criteria from all the units of competency in Masonry ▪ oral questions are designed to enable additional assessment of your underpinning knowledge ▪ you should present your responses as directed by the assessor ▪ answer all the questions asked by the assessor as best as possible	

ORAL QUESTIONS			
Question		Place a ✓in the appropriate box to show if evidence has been demonstrated competently	
		Yes	**No**
1.	What will you do when there is too much noise in the workplace?	☐	☐
2.	What does the following sign mean: 	☐	☐
3.	What does the following sign mean: 	☐	☐
4.	What are your duties and responsibilities as a Mason?	☐	☐
5.	Interpret the following technical drawing: 	☐	☐
6.	What happens to bolt and nut heads due to use of an adjustable wrench instead of a box wrench?	☐	☐
7.	What is the official system of measurement in almost every country in the world?	☐	☐
8.	What are the coarse aggregates generally used for making concrete?	☐	☐
9.	State the quality of water that is suitable for mixing masonry materials and curing purposes.	☐	☐
10.	What is meant by building layout?	☐	☐
11.	What are the braces?	☐	☐
12.	How would you prevent the occurrence of an uneven surface while plastering a wall?	☐	☐
13.	Why is the slump test done?	☐	☐
14.	What is a wall panel?	☐	☐
15.	What are the uses of asphalt and bitumen?	☐	☐
16.	Hasan mixed a bag of cement, sand and water to make mortar.	☐	☐

	After preparing the mortar, he went off with his friends to have his lunch in a nearby shop and then had a meeting with his supervisor. He came back after an hour and started to build the wall using the prepared mortar. However, he observed that the mortar was not sticking well and falling off. Please state possible reasons for this and remedial measures that Hasan can take to fix the mortar.		
17.	Bilal is building a brick wall and has reached a height of 600mm. But to his dismay, the wall falls!! Please state possible reasons for this and remedial measures that Bilal can take to fix the issue.	☐	☐
18.	Husham has finished building a brick wall. He has to start the plastering and finishing work. What tools should he collect and use to carry out the job efficiently?	☐	☐
19.	What steps should Husham take to prepare the surface for plastering?	☐	☐
20.	The wall that Husham has to plaster is not level and has an uneven surface. What steps should Husham take to correct these problems?	☐	☐

Feedback to candidate:

Assessment decision for this assessment activity:

☐ **Competent** ☐**Not Yet Competent**

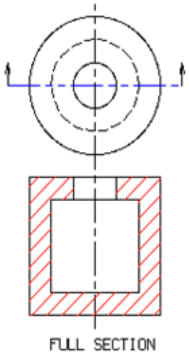
Candidate's Signature:		**Date:**	
Assessor' Signature:		**Date:**	

Oral Questioning Guideline

General Guidelines For Effective Questioning
▪ Keep questions short and focused on one key concept
▪ Ensure that questions are structured
▪ Test the questions to check that they are not ambiguous
▪ Use `open-ended questions such as `what if...?' and `why...?' questions, rather than closed questions
▪ Keep questions clear and straight forward and ask one at a time
▪ Use words that the candidate is able to understand
▪ Look at the candidate when asking questions
▪ Check to ensure that the candidate fully understands the questions
▪ Ask the candidate to clarify or re-phrase their answer if the assessor does not understand the initial response
▪ Confirm the candidate's response by repeating the answer back in his/her own words
▪ Encourage a conversational approach with the candidate when appropriate, to put him or her at ease
▪ Use questions or statements as prompts for keeping focused on the purpose of the questions and the kind of evidence being collected
▪ Use language at a suitable level for the candidate
▪ Listen carefully to the answers for opportunities to find unexpected evidence
▪ Follow up responses with further questions, if useful, to draw out more evidence or to make links between knowledge areas
▪ Compile a list of acceptable responses to ensure reliability of assessments

Oral Questions (Optional) - Answers

Answers are highlighted in **bold** and *italics*.

ORAL QUESTIONS		
Question		**Answer**
1.	What will you do when there is too much noise in the workplace?	***Use appropriate personal protective equipment (PPE)in the workplace such as ear plugs.*** ***Provide sound proofing in the workplace, if possible.***
2.	What does the following sign mean: 	***High voltage electricity hazard***
3.	What does the following sign mean: 	***Emergency exit***
4.	What are your duties and responsibilities as a Mason?	***May include but are not limited to the following answers:*** ▪ ***Awareness and practice good occupational health and safety in the workplace*** ▪ ***Awareness on proper and safe use of tools, equipment, supplies and materials*** ▪ ***Perform basic masonry works***
5.	Interpret the following technical drawing: 	***This is a full section view used to show the object as if one half of the object was removed.***
6.	What happens to bolt and nut heads due to use of an adjustable wrench instead of a box wrench?	***Chance of slip and may cause accident.***
7.	What is the official system of measurement in almost every country in the world?	***Metric.***
8.	What are the coarse aggregates generally used for making concrete?	***The following coarse aggregates are generally used for making concrete:*** ▪ ***Gravel stone chips*** ▪ ***Broken stone chips***

		▪ ***Broken brick chips (khoa)***
9.	State the quality of water that is suitable for mixing masonry materials and curing purposes.	***Potable water.***
10.	What is meant by building layout?	***To transfer the plan, length and width of its foundation on the ground so that the foundation can be excavated for construction of a building as per drawing.***
11.	What are the braces?	***Braces are the diagonal members that are connected with standards to stiffen the scaffold***
12.	How would you prevent the occurrence of an uneven surface while plastering a wall?	***Using appropriate levelling tools during construction.***
13.	Why is the slump test done?	***The slump test is done to check the consistency of freshly made concrete and to make sure a concrete mix is workable.***
14.	What is a wall panel?	***A wall panel is single piece of material, usually flat and cut into a rectangular shape that serves as the visible and exposed covering for a wall.***
15.	What are the uses of asphalt and bitumen?	***Asphalt and bitumen are mainly used in road construction and but also used for bituminous waterproofing products, including production of roofing felt and for sealing flat roofs.***
16.	Hasan mixed a bag of cement, sand and water to make mortar. After preparing the mortar, he went off with his friends to have his lunch in a nearby shop and then had a meeting with his supervisor. He came back after an hour and started to build the wall using the prepared mortar. However, he observed that the mortar was not sticking well and falling off. Please state possible reasons for this and remedial measures that Hasan can take to fix the mortar.	***This happened due to chemical action and delay of time.*** ***To avoid this type of problem, always mix in dry conditions and add water just before using.*** ***The existing mortar can be used with adding some new materials as per ratio but this is not recommended.***
17.	Bilal is building a brick wall and has reached a height of 600mm. But to his dismay, the wall falls!! Please state possible reasons for this and remedial measures that Bilal can take to fix the issue.	***Possible reasons are:*** ▪ ***base of wall is not levelled and compacted*** ▪ ***correct bond is not followed*** ▪ ***wall is not true vertical*** ***For remedial reasons avoid all possible causes.***
18.	Husham has finished building a brick wall. He has to start the plastering and finishing work. What tools should he collect and use to carry out the job efficiently?	***Plastering trowels, wooden floats and other common tools for masonry work.***
19.	What steps should Husham take to prepare the surface for plastering?	***Remove all the loose and unwanted materials from the surface, racked out the joints using proper tools, and wash the surface with clean water.***
20.	The wall that Husham has to plaster is not level and has an uneven surface.	***Add more mortar on the uneven surface and finish accordingly.***

	What steps should Husham take to correct these problems?	***This must be done within a moist condition.***

Assessment Evidence Summary Sheet

EVIDENCE SUMMARY SHEET			
Candidate Name:			
Assessor Name:			
Qualification:	Certificate in Masonry		
Assessment Centre:			
Date(s) of Assessment:			
The performance of the candidate in the following unit or units of competency and the methods engaged to assess performance are as follows:			
Unit of Competency	**Assessment Method**	**Competent**	**Not Yet Competent**
All units of competency comprising of the qualification	Written Test	☐	☐
	Practical Demonstration 1 (Set …..)	☐	☐
	Practical Demonstration 2 (Set …..)	☐	☐
	Oral Questioning (optional)	☐	☐
Note: Issuance of a certificate will only be given to a candidate who has successfully been assessed as competent for **ALL** units of competency.			
Recommendation			
❑ Issuance of Statement of Achievement *(indicate title of SOA, if full Certificate is not met)*	❑ Submission of additional documents Specify:	❑ Reassessment Specify:	
Did the candidate overall performance meet the required evidence/standard?		☐ Yes ☐ No	
Overall Evaluation:	❑ **Competent** ❑ **Not Yet Competent**		
General Comments:			
Candidate Signature:		Date:	
Assessor Signature:		Date:	
Institution Manager Signature:		Date:	

CANDIDATES COPY

(Please presents this form when you claim your Certificate)

ASSESSMENT RESULTS SUMMARY			
Qualification:	Certificate in Masonry		
Name of Candidate:		**Date:**	
Name at Assessment Centre:		**Date:**	
Assessment Results:	❑ **Competent** ❑ **Not Yet Competent**		
Recommendation:	❑ Issuance of SOA *(indicate title of SOA, if full certificate is not met)*		
	❑ Submission of additional documents – specify:		
	❑ Reassessment - specify:		
Assessed by: (name and signature)		**Date:**	
Attested by: (name and signature):		**Date**	

Assessment Validation Map

This identifies how the assessment tools in this resource assess:

- elements and performance criteria
- critical aspects of assessment
- skills and knowledge
- employability skills

Unit of Competency:	SEIP-CON-MAS-01-G – Perform computations using basic mathematical concepts		
Element	**Assessment Method**		
	Written	**Practical**	**Oral**
1. Identify calculation requirements in the workplace	1	A1, A2, B1, B2, C1, C2	
2. Select appropriate mathematical methods/concepts for the calculation	1	A1, A2, B1, B2, C1, C2	
3. Use tool/instrument to perform calculation		A1, A2, B1, B2, C1, C2	6
Unit of Competency:	SEIP-CON-MAS-02-G – Apply occupational health and safety (OHS) practices in the workplace		
Element	**Assessment Method**		
	Written	**Practical**	**Oral**
1. Identify OHS policies and procedures	9, 12, 14	A1, A2, B1, B2, C1, C2	1
2. Apply personal health and safety practices		A1, A2, B1, B2, C1, C2	
3. Report hazards and risks	12, 14	A1, A2, B1, B2, C1, C2	
4. Respond to emergencies		A1, A2, B1, B2, C1, C2	
Unit of Competency:	SEIP-CON-MAS-03-G – Communicate in English in the workplace		
Element	**Assessment Method**		
	Written	**Practical**	**Oral**
1. Read and understand workplace documents in English	11		2

2. Write simple workplace communications in English	11		
3. Listen and comprehend to English conversations		A1, A2, B1, B2, C1, C2	2
4. Perform conversations in English language		A1, A2, B1, B2, C1, C2	2

Unit of Competency:	SEIP-CON-MAS-04-G – Operate in a self-directed team

Element	**Assessment Method**		
	Written	**Practical**	**Oral**
1. Identify team goals and work processes			3
2. Communicate and cooperate with team members	10	A1, A2, B1, B2, C1, C2	
3. Work as a team member	3, 10	A1, A2, B1, B2, C1, C2	
4. Solve problems as a team member			3

Unit of Competency:	SEIP-CON-MAS-01-S – Translate drawings, plans and specifications

Element	**Assessment Method**		
	Written	**Practical**	**Oral**
1. Interpret drawings and specifications from manuals, design and plans	17, 20		9, 16
2. Interpret drawings and specifications from manuals, designs and plans		A1, A2, B1, B2, C1, C2	
3. Store manuals, designs and plans			9, 16

Unit of Competency:	SEIP-CON-MAS-02-S – Work with hand tools and power tools

Element	**Assessment Method**		
	Written	**Practical**	**Oral**
1. Inspect hand tools and power tools for usability	4	A1, A2, B1, B2, C1, C2	
2. Use hand tools properly and safely		A1, A2, B1, B2, C1, C2	5
3. Operate power tools properly and safely		A1, A2, B1, B2, C1, C2	

4. Clean/maintain hand tools and power tools after use		A1, A2, B1, B2, C1, C2	

Unit of Competency:	SEIP-CON-MAS-03-S – Carry out measurements and calculations

Element	**Assessment Method**		
	Written	**Practical**	**Oral**
1. Check usability of measuring devices		A1, A2, B1, B2, C1, C2	
2. Carry out accurate construction work measurement		A1, A2, B1, B2, C1, C2	6
3. Execute simple construction work calculations		A1, A2, B1, B2, C1, C2	
4. Clean and maintain measuring instruments		A1, A2, B1, B2, C1, C2	

Unit of Competency:	SEIP-CON-MAS-01-O – Make masonry mortar/stucco

Element	**Assessment Evidence Method**		
	Written	**Practical**	**Oral**
1. Gather mortar making tools, equipment and materials	2, 6, 15, 17	A1, A2, B1, B2, C1, C2	7, 8, 17
2. Prepare mortar mixing box/containment		A1, A2, B1, B2, C1, C2	15
3. Make mortar/stucco	2, 6	A1, A2, B1, B2, C1, C2	15
4. Clean and maintain the workplace		A1, A2, B1, B2, C1, C2	

Unit of Competency:	SEIP-CON-MAS-02-O – Carry out pavement laying work

Element	**Assessment Method**		
	Written	**Practical**	**Oral**
1. Gather pavement laying tools, equipment and materials	15, 17	A1, A2, B1, B2, C1, C2	8

2. Prepare concrete making raw materials	7, 8, 15	A1, A2, B1, B2, C1, C2	
3. Set up base for paving work		A1, A2, B1, B2, C1, C2	
4. Lay paving bricks/bocks	16	A1, A2, B1, B2, C1, C2	
5. Complete the paving work		A1, A2, B1, B2, C1, C2	
6. Clean and maintain the workplace		A1, A2, B1, B2, C1, C2	

Unit of Competency:	SEIP-CON-MAS-03-O – Pile structural bricks and blocks

Element	**Assessment Method**		
	Written	**Practical**	**Oral**
1. Prepare location	15, 20	A1, A2, B1, B2, C1, C2	7
2. Build a concrete footer	17	A1, A2, B1, B2, C1, C2	
3. Lay brick or block structure		A1, A2, B1, B2, C1, C2	
4. Finish brick or block laying work and curing		A1, A2, B1, B2, C1, C2	
5. Clean/maintain the workplace		A1, A2, B1, B2, C1, C2	

Unit of Competency:	SEIP-CON-MAS-04-O – Carry out stone and brick works

Element	**Assessment Method**		
	Written	**Practical**	**Oral**
1. Gather masonry working tools, equipment and materials at site	15	A1, A2, B1, B2, C1, C2	
2. Organize bricks/blocks at work site	15	A1, A2, B1, B2, C1, C2	

3. Create cement mortar/stucco	17	A1, A2, B1, B2, C1, C2	9
4. Prepare for brick/block installation	13	A1, A2, B1, B2, C1, C2	10
5. Carry out brick/block installation work		A1, A2, B1, B2, C1, C2	18
6. Clean/maintain the workplace		A1, A2, B1, B2, C1, C2	

Unit of Competency:	SEIP-CON-MAS-05-O – Accomplish masonry surface plastering

Element	**Assessment Method**		
	Written	**Practical**	**Oral**
1. Clean the masonry surface area prior to plastering		A2, B2, C2	11, 19
2. Mix plaster materials	15, 17	A2, B2, C2	8
3. Apply plaster on plain surfaces	18	A2, B2, C2	
4. Apply plaster to corners		A2, B2, C2	
5. Clean/maintain the workplace		A2, B2, C2	

Unit of Competency:	SEIP-CON-MAS-06-O – Perform pattern stone finishing work

Element	**Assessment Method**		
	Written	**Practical**	**Oral**
1. Plan out for pattern stone work	17		
2. Gather tools, equipment and materials	15	A2, B2, C2	7
3. Mix pattern stone materials		A2, B2, C2	12
4. Pour cement mixture		A1, A2, B1, B2, C1, C2	
5. Complete curing of concrete		A2, B2, C2	

6. Clean/maintain the workplace		A1, A2, B1, B2, C1, C2	

Unit of Competency:	SEIP-CON-MAS-07-O – Perform wall panelling using bricks/stones

Element	**Assessment Method**		
	Written	**Practical**	**Oral**
1. Gather tools and materials	15, 17	A1, A2, B1, B2, C1, C2	
2. Organize for wall panelling works using bricks/stones		A2, B2, C2	13
3. Prepare wall surface for brick/stone panelling		A1, A2, B1, B2, C1, C2	
4. Mix mortar/bonding components		A1, A2, B1, B2, C1, C2	
5. Accomplish wall panelling works		A2, B2, C2	
6. Clean/maintain the workplace		A1, A2, B1, B2, C1, C2	

Unit of Competency:	SEIP-CON-MAS-08-O – Apply waterproofing activities in construction

Element	**Assessment Method**		
	Written	**Practical**	**Oral**
1. Organize work area for water proofing	12, 14, 15, 19		14
2. Prepare concrete prior to waterproofing	17		
3. Apply waterproofing material	14, 15	A1, B1, C1	
4. Perform other waterproofing considerations			14
5. Clean/maintain the workplace		A1, A2, B1, B2, C1, C2	