Skills for Employment Investment Program (SEIP)

ASSESSMENT TOOL

FOR

ALUMINIUM FABRICATION AND INSTALLATION

(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 **Aluminium Fabrication & Installation**, 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-ALU-01-G	Perform computations using basic mathematical concepts
SEIP-CON-ALU-02-G	Apply occupational health and safety (OHS) practices in the workplace
SEIP-CON-ALU-03-G	Communicate in English in the workplace
SEIP-CON-ALU-04-G	Operate in a self-directed team
Sector-specific Competencies	
SEIP-CON-ALU-01-S	Translate drawings, plans and specifications
SEIP-CON-ALU-02-S	Work with hand tools and power tools
SEIP-CON-ALU-03-S	Carry out measurements and calculations
Occupation-specific Competencies	
SEIP-CON-ALU-01-O	Explain fundamentals of aluminium materials and processes
SEIP-CON-ALU-02-O	Cut aluminium profile materials
SEIP-CON-ALU-03-O	Fabricate and install aluminium windows and glass
SEIP-CON-ALU-04-O	Fabricate and install aluminium doors and glass
SEIP-CON-ALU-05-O	Fabricate and install aluminium partition and glass
SEIP-CON-ALU-06-O	Fabricate and install aluminium false ceiling

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:	Aluminium Fabrication and Installation					
Unit Name:	Perform computations using basic mathematical concepts					
Unit Code:	SEIP-CON-ALU-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:	Aluminium Fabrication and Installation					
Unit Name:	Apply occupational health and safety (OHS) practices in the workplace					
Unit Code:	SEIP-CON-ALU-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:	Aluminium Fabrication and Installation					
Unit Name:	Communicate in English in the workplace					
Unit Code:	SEIP-CON-ALU-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:	Aluminium Fabrication and Installation		
Unit Name:	Operate in a self-directed team		
Unit Code:	SEIP-CON-ALU-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:	Aluminium Fabrication and Installation

Unit Name:	Translate drawings, plans and specifications		
Unit Code:	SEIP-CON-ALU-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. Carry out basic engineering drawings applied in construction	**1.1.** Basic shapes and objects are sketched.		√	
	1.2. Skills to properly use manual drafting equipment are demonstrated.	√		
	1.3. Geometric shapes utilizing manual drafting equipment is created.	√		
	1.4. Communication through manual lettering is clearly demonstrated.		√	
2. Access information from manuals, designs and plans	**2.1.** Appropriate manuals are identified and accessed.	√		√
	2.2. Version and date of the manual are checked to ensure up-to-date specifications of tools, equipment, materials and procedures.			√
3. Interpret drawings and specifications form manuals, designs and plans	**3.1.** Relevant drawings and specifications are correctly recognized from manuals, designs and plans.			√
	3.2. Terms and abbreviations are recognized.			√
	3.3. Signs and symbols are interpreted.		√	
4. Store manuals, designs and plans	**4.1.** Manuals, designs and plans are collected and packed.		√	
	4.2. Manuals, designs and plans are stored to prevent damage, and ready access and updating of information when required.		√	

Occupation:	Aluminium Fabrication and Installation		
Unit Name:	Work with hand tools and power tools		
Unit Code:	SEIP-CON-ALU-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**
	1.1. Appropriate tools are selected.	√		

1. Inspect hand tools and power tools for usability	**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. Use hand tools properly and safely	**2.1.** Appropriate hand tool for the job is used.	√		
	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 after use	**4.1.** Dust and foreign matters are removed from power tools in accordance to workplace standard.	√		
	4.2. Condition of tools is checked after use.	√		
	4.3. Appropriate lubricant is applied after use and prior to storage.	√		
	4.4. Measuring tools are checked and calibrated.	√		
	4.5. Defective tools, instruments, power tools and accessories are inspected and corrected or replaced.	√		

Occupation:	Aluminium Fabrication and Installation				
Unit Name:	Carry-out measurements and calculations				
Unit Code:	SEIP-CON-ALU-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**
	1.1. Appropriate measuring device is selected for the job.			√		

1. Check usability of measuring devices	**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. Carry-out accurate construction work measurements	**2.1.** Measurements are obtained using appropriate measuring device.	√		√
	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:	Aluminium Fabrication and Installation		
Unit Name:	Explain fundamentals of aluminium materials and processes		
Unit Code:	SEIP-CON-ALU-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**
	1.1. Properties of aluminium materials are identified.		√	

1. Describe the properties of aluminium materials	**1.2.** Uses of aluminium in the construction sector is identified.		√	
	1.3. Advantages and disadvantages of aluminium materials in construction application is explained.		√	
2. Identify the fabrication processes for aluminium profiles	**2.1.** Aluminium production by extrusion method is identified.		√	
	2.2. Fabrication processes for aluminium profiles are identified.			√

Occupation:	Aluminium Fabrication and Installation					
Unit Name:	Cut aluminium materials/profiles					
Unit Code:	SEIP-CON-ALU-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. Prepare machines and work area for safe operation	**1.1.** Machines used for aluminium fabrication works are prepared and checked for operating condition.			√		√
	1.2. Tools and personal protective equipment (PPE) are gathered and check for usability.			√	√	
	1.3. Work area is cleaned and prepared for safe cutting operation.			√		√
2. Perform cutting of aluminium materials	**2.1.** Recommended aluminium cutting equipment and tools are used to cut aluminium profiles safely.			√	√	
	2.2. Hazards associated when performing aluminium cutting and grinding work is identified.				√	
	2.3. Personal protective equipment is used when cutting aluminium materials.			√		
	2.4. Cutting of aluminium materials is performed in accordance with workplace requirements.			√	√	
3. Finish cut ends of Aluminium materials tools	**3.1.** Appropriate processes are carried out on an aluminium end after cutting.			√		√
	3.2. Cut ends of Aluminium materials are finished in accordance with workplace/work plan specification.			√		
4. Clean and maintain tools. equipment and work area	**4.1.** PPE, tools and equipment are cleaned and checked for usability.			√	√	
	4.2. Work area is cleaned in accordance with workplace requirements.			√	√	
	4.3. Tools, equipment and PPEs are stored in accordance with workplace policy.			√		√

Occupation:	Aluminium Fabrication and Installation					
Unit Name:	Fabricate and install aluminium windows					
Unit Code:	SEIP-CON-ALU-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. Identify work requirements	**1.1.** Dimensions of aluminium windows are identified in accordance with workplace plan/drawing and specifications.			√		√
	1.2. Types/classification of aluminium profile is identified in accordance with workplace plan/drawing and specifications.			√		
	1.3. Shape of aluminium profile for window and glass works is determined.				√	
	1.4. Work requirements are identified in accordance with workplace plan/drawing and specifications				√	
2. Prepare for work	**2.1.** Tools and equipment are gathered and checked for usability and working conditions.			√		√
	2.2. Materials are gathered and checked for quality and compliance to workplace specifications			√	√	
3. Fabricate aluminium structure for windows	**3.1.** Aluminium profile/materials are measured in accordance with work plan/drawing specifications			√		
	3.2. Aluminium profile/materials are cut in accordance with work plan/drawing specifications			√		
	3.3. Method of assembly of structure for windows is identified in accordance with workplace plan/drawing specifications.			√		
	3.4. Assembly of aluminium structure for windows is performed in accordance with plans/drawings.			√		
4. Install aluminium windows and glass	**4.1.** Aluminium window frame/structure is installed on location in accordance with workplace requirement.			√		
	4.2. Aluminium window frame/structure is fixed on location in accordance with workplace requirements.			√		
	4.3. Type of glass and size to be installed is identified in accordance with work plan/drawing specification.			√		
	4.4. Glasses are cut to specified dimension in accordance with work plan/drawing specification			√		
	4.5. Glasses are installed into the aluminium window frame/structure safely and in accordance with workplace requirements.			√		

5. Clean and maintain tools, equipment and work area	**5.1.** PPE, tools and equipment are cleaned and checked for usability	√		
	5.2. Work area is cleaned in accordance with workplace requirements	√		
	5.3. Tools, equipment and PPEs are stored in accordance with workplace policy.	√		

Occupation:	Aluminium Fabrication and Installation					
Unit Name:	Fabricate and install aluminium doors and glass					
Unit Code:	SEIP-CON-ALU-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. Identify work requirements	**1.1.** Dimensions of Aluminium doors are identified in accordance with workplace plan/drawing and specifications.			√		√
	1.2. Types/classification of Aluminium profile for door is identified in accordance with workplace plan/drawing and specifications.			√		
	1.3. Shape of Aluminium profile for door and glass works is determined.				√	
	1.4. Work requirements are identified in accordance with workplace plan/drawing and specifications.				√	
2. Prepare for work	**2.1.** Tools and equipment are gathered and checked for usability and working conditions.			√		√
	2.2. Materials are gathered and checked for quality compliance to workplace specifications.			√		√
3. Fabricate aluminium structure for doors	**3.1.** Aluminium profile/materials are measured in accordance with work plan/drawing specifications.			√		
	3.2. Aluminium profile/materials are cut in accordance with work plan/drawing specifications.			√		
	3.3. Method of assembly of structure for doors are identified in accordance with workplace plan/drawing specifications.			√		
	3.4. Assembly of aluminium structure for doors is performed in accordance with plans/drawings.			√		
4. Install aluminium door and glass	**4.1.** Aluminium door frame/structure is installed on location in accordance with workplace requirement.			√		
	4.2. Aluminium window frame/structure is fixed on location in accordance with workplace requirements.			√		

	4.3. Type of glass and size to be installed is identified in accordance with work plan/drawing specification.	√		
	4.4. Glasses are cut to specified dimension in accordance with work plan/drawing specification.	√		
	4.5. Glasses are installed into the aluminium door frame/structure safely and in accordance with workplace requirements.	√		
5. Clean and maintain tools, equipment and work area	**5.1.** PPE, tools and equipment are cleaned and checked for usability.	√		
	5.2. Work area is cleaned in accordance with workplace requirements.	√		
	5.3. Tools, equipment and PPEs are stored in accordance with workplace policy.	√		

Occupation:	Aluminium Fabrication and Installation		
Unit Name:	Fabricate and install aluminium partition		
Unit Code:	SEIP-CON-ALU-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. Identify work requirements	**1.1.** Dimensions of aluminium partition/wall are identified in accordance with workplace plan/drawing and specifications.			√
	1.2. Types/classification of aluminium profile for partition/wall is identified in accordance with workplace plan/drawing and specifications.		√	
	1.3. Shape of aluminium profile for partition/wall and glass works is determined.		√	
	1.4. Work requirements are identified in accordance with workplace plan/drawing and specifications		√	
2. Prepare for work	**2.1.** Tools and equipment are gathered and checked for usability and working conditions.	√		√
	2.2. Materials are gathered and checked for quality and compliance to workplace specifications.	√		√
3. Fabricate aluminium structure for glass partition/wall	**3.1.** Aluminium profile/materials are measured in accordance with work plan/drawing specifications.	√		
	3.2. Aluminium profile/materials are cut in accordance with work plan/drawing specifications.	√		
	3.3. Method of assembly of aluminium structure for partition/wall is identified in accordance with workplace plan/drawing specifications.		√	

	3.4. Assembly of aluminium structure for partition/wall is performed in accordance with plans/drawings.	√	√	
4. Install aluminium partition/wall and glass	**4.1.** Aluminium partition/wall frame/structure is installed on location in accordance with workplace requirement.	√	√	
	4.2. Aluminium partition/wall frame/structure is fixed on location in accordance with workplace requirements.	√	√	
	4.3. Type of glass and size to be installed is identified in accordance with work plan/drawing specification.		√	
	4.4. Glasses are cut to specified dimension in accordance with work plan/drawing specification.		√	
	4.5. Glasses are installed into the aluminium partition/wall frame/structure safely and in accordance with workplace requirements.		√	
4. Clean and maintain tools, equipment and work area	**5.1.** PPE, tools and equipment are cleaned and checked for usability.	√		
	5.2. Work area is cleaned in accordance with workplace requirements.	√		
	5.3. Tools, equipment and PPEs are stored in accordance with workplace policy.	√		

Occupation:	Aluminium Fabrication and Installation		
Unit Name:	Fabricate and install aluminium false ceiling		
Unit Code:	SEIP-CON-ALU-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. Identify work requirements	**1.1.** Dimensions of aluminium false ceiling are identified in accordance with workplace plan/drawing and specifications.			√
	1.2. Types/classification of aluminium profile for false ceiling is identified in accordance with workplace plan/drawing and specifications.		√	
	1.3. Shape of aluminium profile for false ceiling and board work is determined.		√	
	1.4. Work requirements are identified in accordance with workplace plan/drawing and specifications.		√	
2. Prepare for work	**2.1.** Tools and equipment are gathered and checked for usability and working conditions.	√		√
	2.2. Materials are gathered and checked for quality and compliance to workplace specifications.	√		√

3. Fabricate aluminium structure for false ceiling design	**3.1.**	Aluminium profile/materials are measured in accordance with work plan/drawing specifications.	√		
	3.2.	Aluminium profile/materials are cut in accordance with work plan/drawing specifications.	√		
	3.3.	Method of assembly of aluminium structure for false ceiling are identified in accordance with workplace plan/drawing specifications.		√	
	3.4.	Assembly of aluminium structure for false ceiling is performed in accordance with plans/drawings.		√	
4. Install aluminium structure for false ceiling and board.	**4.1.**	Aluminium frame/structure of false ceiling is installed on location in accordance with workplace requirement.		√	
	4.2.	Aluminium frame/structure of false ceiling is fixed on location in accordance with workplace requirements.		√	
	4.3.	**Type of ceiling board** and size to be installed is identified in accordance with work plan/drawing specification.		√	
	4.4.	Ceiling board are cut to specified dimension in accordance with work plan/drawing specification.		√	
	4.5.	Ceiling board are installed into the aluminium false ceiling frame/structure in accordance with workplace requirements.		√	
5. Clean and maintain tools, equipment and work area	**5.1.**	PPE, tools and equipment are cleaned and checked for usability.	√		
	5.2.	Work area is cleaned in accordance with workplace requirements.	√		
	5.3.	Tools, equipment and PPEs are stored in accordance with workplace policy.	√		

PART B – THECANDIDATE

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 Aluminium Fabrication & Installation. 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, and 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:	**Aluminium Fabrication and Installation**
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:** Explain fundamentals of aluminium materials and processes Cut aluminium profile materials Fabricate and install aluminium windows and glass Fabricate and install aluminium doors and glass Fabricate and install aluminium partition and glass Fabricate and install aluminium false ceiling

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 the 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 (PPE)		
• Maintain personal hygiene		
• Identify, assess and control hazards and risks		
• Report incidents arising from hazards and risks to authority		
• Implement corrective actions to correct unsafe conditions in the workplace.		
• Respond to alarms and warning devices		
• Implement emergency response plans and procedures		
• Apply first aid procedure 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		
• Maintain relationships within team and with other workers		
• 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 evaluate the outcome of the implemented solution		
• Sketch basic shapes and objects		

• Demonstrate skills to properly use manual drafting equipment		
• Create geometric shapes utilizing manual drafting equipment		
• Demonstrate communication through manual lettering		
• Identify and access appropriate manuals		
• Check version and date of the manual to ensure up-to-date specifications of tools, equipment, materials and procedures		
• Recognize relevant drawings and specifications from manuals, designs and plans		
• Recognize terms and abbreviations		
• 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 requirement		
• 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 power supply outlet and electrical cord for use 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 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 or replace defective tools, instruments, power tools		
• Select appropriate measuring device		
• Determine applications of measuring device		
• Check and verify usability of measuring device		
• Prepare measuring device		
• Analyse working drawings		
• Obtain measurements using appropriate measuring device		
• Identify and convert systems of measurements where necessary.		

• Confirm and record measurement results		
• Estimate materials requirements		
• Identify tools and equipment		
• Identify manpower requirements and skills		
• 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		
• Remove dust and foreign matters from measuring instrument		
• 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		
• Identify properties of aluminium materials		
• Identify uses of aluminium in the construction sector		
• Explain advantages and disadvantages of aluminium materials in construction application		
• Identify aluminium production by extrusion method		
• Identify fabrication processes for aluminium profiles		
• Prepare machines used for aluminium fabrication works and check for operating condition		
• Clean and prepare work area for safe cutting operation		
• Use recommended aluminium cutting equipment and tools to cut aluminium profiles safely		
• Identify hazards associated when performing aluminium cutting and grinding work		
• Perform cutting of aluminium materials in accordance with workplace requirements		
• Carry out appropriate processes on an aluminium end after cutting		
• Finish cut ends of aluminium materials in accordance with workplace/work plan specification		
• Identify dimensions of aluminium windows in accordance with workplace plan/drawing and specifications		
• Identify types/classification of aluminium profile is in accordance with workplace plan/drawing and specifications		
• Determine shape of aluminium profile for window and glass works		
• Gather and check tools and equipment for usability and working conditions		
• Gather and check materials for quality and compliance to workplace specifications		
• Measure aluminium profile/materials in accordance with work plan/drawing specifications		

• Cut aluminium profile/materials in accordance with work plan/drawing specifications		
• Identify method of assembly of structure for windows in accordance with workplace plan/drawing specifications		
• Perform assembly of aluminium structure for windows in accordance with plans/drawings		
• Install aluminium window frame/structure on location in accordance with workplace requirement		
• Fix aluminium window frame/structure on location in accordance with workplace requirements		
• Identify type of glass and size to be installed in accordance with work plan/drawing specification		
• Cut glasses to specified dimension in accordance with work plan/drawing specification		
• Install glasses into the aluminium window frame/structure safely and in accordance with workplace requirements		
• Identify dimensions of aluminium partition/wall in accordance with workplace plan/drawing and specifications		
• Identify types/classification of aluminium profile for door in accordance with workplace plan/drawing and specifications		
• Determine shape of aluminium profile for door and glass works		
• Identify work requirements in accordance with workplace plan/drawing and specifications		
• Identify method of assembly of aluminium structure for door in accordance with workplace plan/drawing specifications		
• Perform assembly of aluminium structure for doors in accordance with plans/drawings		
• Install aluminium door frame/structure on location in accordance with workplace requirement		
• Fix aluminium door frame/structure on location in accordance with workplace requirements		
• Identify type of glass and size to be installed in accordance with work plan/drawing specification		
• Cut glasses to specified dimension in accordance with work plan/drawing specification		
• Install glasses into the aluminium door frame/structure safely and in accordance with workplace requirements		
• Identify dimensions of aluminium partition/wall in accordance with workplace plan/drawing and specifications		
• Identify types/classification of aluminium profile for partition/wall in accordance with workplace plan/drawing and specifications		
• Determine shape of aluminium profile for partition/wall and glass works		
• Identify method of assembly for partition/wall in accordance with workplace plan/drawing		
• Perform assembly of structure for partition/wall in accordance with plans/drawings		
• Install aluminium partition/wall frame/structure on location in accordance with workplace requirement		
• Fix aluminium partition/wall frame/structure on location in accordance with workplace requirements		
• Identify type of glass and size to be installed in accordance with work plan/drawing specification		
• Cut glasses to specified dimension in accordance with work plan/drawing specification		

• Install glasses into the aluminium partition/wall frame/ structure safely and in accordance to workplace requirements		
• Identify dimensions of aluminium false ceiling in accordance with workplace plan/drawing and specifications		
• Identify types/classification of aluminium profile for false ceiling in accordance with workplace plan/drawing and specifications		
• Determine shape of aluminium profile for false ceiling and board work		
• Identify method of assembly of aluminium structure for false ceiling in accordance with workplace plan/drawing specifications		
• Perform assembly of aluminium structure for false ceiling in accordance with plans/drawings		
• Install aluminium frame/structure of false ceiling on location in accordance with workplace requirement		
• Fix aluminium frame/structure of false ceiling on location in accordance with workplace requirements		
• Identify type of ceiling board and size to be installed in accordance with work plan/drawing specification		
• Cut ceiling board to specified dimension in accordance with work plan/drawing specification		
• Install ceiling board into the aluminium false ceiling frame/structure in accordance with workplace requirements		
• Clean and check PPE, tools and equipment for usability		
• Clean work area in accordance with workplace requirements		
• Store tools, equipment and PPEs in accordance with workplace policy		

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 – Aluminium Fabrication and Installation

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 Aluminium Fabrication & Installation, you must demonstrate competence in the following units, as established in the assessment agreement:

CODE	UNIT OF COMPETENCY
Generic Competencies	
SEIP-CON-ALU-01-G	Perform computations using basic mathematical concepts
SEIP-CON-ALU-02-G	Apply occupational health and safety (OHS) practices in the workplace
SEIP-CON-ALU-03-G	Communicate in English in the workplace
SEIP-CON-ALU-04-G	Work in a self-directed team
Sector-specific Competencies	
SEIP-CON-ALU-01-S	Translate drawings, plans and specifications
SEIP-CON-ALU-02-S	Work with hand tools and power tools
SEIP-CON-ALU-03-S	Carry out measurements and calculations
Occupation-specific Competencies	
SEIP-CON-ALU-01-O	Explain fundamentals of aluminium materials and processes
SEIP-CON-ALU-02-O	Cut aluminium profile materials
SEIP-CON-ALU-03-O	Fabricate and install aluminium windows and glass
SEIP-CON-ALU-04-O	Fabricate and install aluminium doors and glass
SEIP-CON-ALU-05-O	Fabricate and install aluminium partition and glass
SEIP-CON-ALU-06-O	Fabricate and install aluminium false ceiling

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

Assessment Agreement	
Occupation:	Aluminium Fabrication and Installation
Assessment Centre:	
Candidate Name:	
Assessor Name:	
Unit of Competency	
Generic Competencies	
SEIP-CON-ALU-01-G	Perform computations using basic mathematical concepts
SEIP-CON-ALU-02-G	Apply occupational health and safety (OHS) practices in the workplace
SEIP-CON-ALU-03-G	Communicate in English in the workplace
SEIP-CON-ALU-04-G	Work in a self-directed team
Sector-specific Competencies	
SEIP-CON-ALU-01-S	Translate drawings, plans and specifications
SEIP-CON-ALU-02-S	Work with hand tools and power tools
SEIP-CON-ALU-03-S	Carry out measurements and calculations
Occupation-specific Competencies	
SEIP-CON-ALU-01-O	Explain fundamentals of aluminium materials and processes
SEIP-CON-ALU-02-O	Cut aluminium profile materials
SEIP-CON-ALU-03-O	Fabricate and install aluminium windows and glass
SEIP-CON-ALU-04-O	Fabricate and install aluminium doors and glass
SEIP-CON-ALU-05-O	Fabricate and install aluminium partition and glass
SEIP-CON-ALU-06-O	Fabricate and install aluminium false ceiling
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 Aluminium Fabrication and Installation, 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 Name:		**Date:**	
Assessor Name:		**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 activities:
        - Set A:
            - fabrication and installation of aluminium window and glass
            - fabrication and installation of aluminium door and glass
        - Set B:
            - fabrication and installation of aluminium partition and glass
            - fabrication and installation of aluminium false ceiling
        - Set C:
            - fabrication and installation of aluminium window (2.0m x 1.5m) and glass
            - fabrication and installation of aluminium false ceiling
    - 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:

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 Aluminium Fabrication & Installation. 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:
     - fabrication and installation of aluminium window and glass (1 hour)
     - fabrication and installation of aluminium door and glass (1 hour)
   - Set B:
     - fabrication and installation of aluminium partition and glass (1 hour)
     - fabrication and installation of aluminium false ceiling (1 hour)
   - Set C:
     - fabrication and installation of aluminium window (2.0m x 1.5m) and glass (1 hour)
     - fabrication and installation of aluminium false ceiling (1 hour)

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 Aluminium Fabrication and Installation.

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 Aluminium Fabrication and Installation
Unit of Competency	
Generic Competencies	
SEIP-CON-ALU-01-G	Perform computations using basic mathematical concepts
SEIP-CON-ALU-02-G	Apply occupational health and safety (OHS) practices in the workplace
SEIP-CON-ALU-03-G	Communicate in English in the workplace
SEIP-CON-ALU-04-G	Operate in a self-directed team
Sector-specific Competencies	
SEIP-CON-ALU-01-S	Translate drawings, plans and specifications
SEIP-CON-ALU-02-S	Work with hand tools and power tools
SEIP-CON-ALU-03-S	Carry out measurements and calculations
Occupation-specific Competencies	
SEIP-CON-ALU-01-O	Explain fundamentals of aluminium materials and processes
SEIP-CON-ALU-02-O	Cut aluminium profile materials
SEIP-CON-ALU-03-O	Fabricate and install aluminium windows and glass
SEIP-CON-ALU-04-O	Fabricate and install aluminium doors and glass
SEIP-CON-ALU-05-O	Fabricate and install aluminium partition and glass
SEIP-CON-ALU-06-O	Fabricate and install aluminium false ceiling
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 Aluminium Fabrication & Installation ▪ 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 500 is 125?	a. 12.5% b. 20% c**.** 25% d. 50%
2.	Improper lifting of heavy objects may result in muscle pains, this type of hazard belongs to:	a. Biological hazards b. Chemical hazards c**.** Ergonomics hazards d. Physical hazards
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.	Which is not a hand tool?	a. Glass cutter b. Meter saw c**.** Rivet gun d. Sealant gun
5.	Which one is not a Systems of Measurement?	a. 250 m b. 5800 m c. 63.5 m d. 3000 m
6.	What is the document that provides critical defining information about a product and can include identification of the manufacturer; a list of rules, bans and standards that apply to the item?	a. Product specification b. Product picture c. Product price d. Product colour
7.	Which glass is manufactured primarily as a fire retardant, with wire mesh inlaid in the glass to prevent it from shattering and breaking out under stress or when exposed to high temperatures?	a. Float glass b. Sheet glass c. Patterned glass d. Wired glass

8.	Aluminium is less expensive compared to	a. Steel b. Iron c. Copper e. All the of the above
9.	The following are PPE's appropriate when cutting the aluminium for fabrication except for:	a. Apron b. Goggles c. Hand gloves d. Open sandals
10.	Shopna recently joined with her new work as aluminium fabricator for windows, as a new member, she should:	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.	Active listening is essential to hear the concerns of your co-worker	True ☐ False ☐
12.	Excessive noise can cause permanent hearing loss	True ☐ False ☐
13.	Apron is a type of clothing used to protect the wearer from injury in the workplace.	True ☐ False ☐
Fill in the Missing Blanks		
Write the word or group of words needed to complete the following sentences.		
14.	_____ is an appropriate process of finish when cut ends of aluminium materials.	
15.	_____is a fabrication process to block the passage of fluids through the surface or joints or openings in materials.	
Short Answer		
Write a short answer in the space provided (not to exceed more than approximately sixty (60) words).		
16.	What are the uses of aluminium?	

17.	What are the appropriate processes to finish cut ends of aluminium materials?	
18.	What are the types of glasses used in windows?	
19.	What are the types or class of aluminium profiles in terms of finish?	
20.	Give at least two methods of assembly for false ceiling	

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 500 is 125?	a. 10% b. 20% ***c. 25%*** d. 50%
2.	Improper lifting of heavy objects may result in muscle pains, this type of hazard belongs to:	a. Biological hazards b. Chemical hazards ***c. Ergonomics hazards*** d. Physical hazards
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.	Which is not a hand tool?	a. Glass cutter b. **Meter saw** c. Rivet gun d. Sealant gun
5.	How many meters is 2500 inches?	a. 250 m b. 5800 m **c. 63.5 m** d. 3000 m
6.	What is the document that provides critical defining information about a product and can include identification of the manufacturer; a list of rules, bans and standards that apply to the item?	***a. Product specification*** b. Product picture c. Product price d. Product colour
7.	Which glass is manufactured primarily as a fire retardant, with wire mesh inlaid in the glass to prevent it from shattering and breaking out under stress or when exposed to high temperatures?	a. Float glass b. Sheet glass c. Patterned glass

		d. Wired glass
8.	Aluminium is less expensive compared to	a. Steel b. Iron c. Copper ***d. All the above***
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.	Shopna recently joined with her new work as aluminium fabricator for windows, as a new member, she should:	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.	Active listening is essential to hear the concerns of your co-worker	***True*** √ False ☐
12.	Excessive noise can cause permanent hearing loss?	***True*** √ False ☐
13.	Apron is a type of clothing used to protect the wearer from injury in the workplace.	***True*** √ False ☐
Fill in the Missing Blanks		
14.	Deburring/filing/chamfering/mitering is an appropriate process of finish when cut ends of aluminium materials.	
15.	Sealing is a fabrication process to block the passage of fluids through the surface or joints or openings in materials.	
Short Answer		
16.	What are the uses of aluminium?	***Uses of aluminium are:*** ***Frames of glass walls, windows, false & cabinets, cast door handles, window catches, and staircase, heating and air conditioning systems.***
17.	What are the appropriate processes to finish cut ends of aluminium materials?	***The appropriate processes are debarring, filing, chamfering and mitering.***
18.	What are the types of glasses used in windows?	***The types of glasses used in windows are float glass, sheet glass, patterned glass, wired glass, reflective, insulated, safety, laminated, toughened, tinted.***
19.	What are the types or class of aluminium profiles in terms of finish?	***In terms of finish the types or classes are anodized, bright clear and black, brass,***

		bronze, mill, satin black, SS brushed, painted and bonded finish.
20.	Give at least two steps of assembly for false ceiling	***May include but not limited to the following:*** ***1. Fix the aluminium or wooden framework to act as supporting structure directly to the existing ceiling or roofing beams.*** ***2. Screw the support to the existing ceiling using screws and plugs.*** ***3. Fix the supports at the same height.*** ***4. Fix vertical struts to the supports.*** ***5. Fix the wall supports and framework members.*** ***6. Apply the insulation.*** ***7. Fix the first row of ceiling panels.*** ***8. Cutting panels to length.*** ***9. Finishing the joints.*** ***10. Edging profile.***

Set A: Practical Demonstration 1

PRACTICAL DEMONSTRATION 1	
Candidate Name:	
Assessor Name:	
Qualification:	Certificate in Aluminium Fabrication and Installation
Task:	Fabricate and install aluminium window and glass
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 Aluminium Fabrication and Installation
- 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 PPE, tools, equipment, aluminium profile materials and glass.
2. Check the usability of PPE, tools, equipment, aluminium profile materials and glass.
3. Carry out measurements, mark and cut aluminium profile materials and glass using appropriate tools.
4. Fabricate aluminium frame and install on selected place.
5. Fix the glass in the aluminium frame.
6. Report to Assessor for final evaluation.
7. Clean tools, equipment and workplace, and restore tools, equipment and excess materials properly.

Drawing, Plan, Diagram or Sketch

The picture given below is how the expected output should look like. You must observe:

- Accuracy of measurements
- Uniformity of ends
- Exactness of cuts of the aluminium frame
- Fitted to the location for installation

You are given total of two (2) hours for the following:

- Collection of tools, relevant materials and resources
- For measurements
- For cutting
- For joining the frame
- For installation
- For cleaning the works

(Ensure that you have avoided waste of materials during cutting)

Aluminium glazed window:

Size of window is 1.5m x 1.0m
Operation type is sliding
Provide locking arrangements
All sides leak proof

Resources Required:	
Tools:	Hack saw with blade Ball peen hammer Plastic hammer Measuring tape Steel rule Tri-square Spirit level Combination pliers Plumb bob Screw drivers Sealant gun Rivet gun (Riveter)
Equipment:	Aluminium profile cutting machine Deburring machine Power drill with drill bits
Machinery:	N/A
Materials:	Aluminium profile materials Glass Sealer Other accessories
PPE:	Apron/Safety cloth Dust mask Safety helmet Safety goggles Hand gloves Safety shoes

Set A: Practical Demonstration 1 – Observation Checklist

PRACTICAL DEMONSTRATION 1 – OBSERVATION CHECKLIST	
Candidate Name:	
Assessor Name:	
Qualification:	Certificate in Aluminium Fabrication and Installation
Task:	Fabricate and install aluminium window and glass
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	☐	☐
Determined application of tools to job requirements	☐	☐
Prepared hand and power tools	☐	☐
Used appropriate hand tool for the job	☐	☐
Applied proper and safe use/operation of hand tools	☐	☐
Used power tools safely in accordance to manufacturer's specification	☐	☐
Selected appropriate measuring device for the job	☐	☐
Prepared measuring device	☐	☐
Calculated material quantities	☐	☐
Interpreted and communicated results to appropriate authority	☐	☐

Checked and calibrated measuring instruments	☐	☐
Finished cut ends of aluminium materials in accordance with workplace/work plan specification	☐	☐
Identified types/classification of aluminium profile in accordance with workplace plan/drawing and specifications	☐	☐
Measured aluminium profile/materials in accordance with work plan/drawing specifications	☐	☐
Cut aluminium profile/materials in accordance with work plan/drawing specifications	☐	☐
Identified method of assembly of structure for windows in accordance with workplace plan/drawing specifications	☐	☐
Performed assembly of aluminium structure for windows in accordance with plans/drawings	☐	☐
Installed aluminium window frame/structure on location in accordance with workplace requirement	☐	☐
Fixed aluminium window frame/structure on location in accordance with workplace requirements	☐	☐
Identified type of glass and size to be installed in accordance with work plan/drawing specification	☐	☐
Cut glasses to specified dimension in accordance with work plan/drawing specification	☐	☐
Installed glasses into the Aluminium window frame/structure safely and in accordance with workplace requirements	☐	☐
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 Aluminium Fabrication and Installation
Task:	Fabricate and install aluminium door and glass
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 Aluminium Fabrication and Installation
- 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 PPE, tools, equipment, aluminium profile materials and glass.
2. Check the usability of PPE, tools, equipment, aluminium profile materials and glass.
3. Carry out measurements, mark and cut aluminium profile materials and glass using appropriate tools.
4. Fabricate aluminium frame and install on selected place.
5. Fix the glass in the aluminium frame.
6. Report to Assessor for final evaluation.
7. Clean tools, equipment and workplace, and restore tools, equipment and excess materials properly.

Drawing, Plan, Diagram or Sketch

The picture given below is how the expected output should look like. You must observed:

- Accuracy of measurements
- Uniformity of ends
- Exactness of cuts of the aluminium frame
- Fitted to the location for installation

You are given total of two (2) hours for the following:

- Collection of tools, relevant materials & resources
- For measurements
- For cutting
- For joining the frame
- For installation
- For cleaning the works

(Ensure that you have avoided waste of materials during cutting)	
Aluminium glazed door: Size of door is 1.0m x 2.1m Operation type is swing/casement/hinged Provide locking arrangements Provide handle system Bottom clearance 10mm	
Resources Required:	
Tools:	Hack saw with blade Ball peen hammer Plastic hammer Measuring tape Steel rule Tri-square Spirit level Combination pliers Plumb bob Screw drivers Sealant gun Rivet gun (Riveter)
Equipment:	Aluminium profile cutting machine Deburring machine Power drill with drill bits
Machinery:	N/A
Materials:	Aluminium profile materials Glass Sealer
PPE:	Apron/Safety cloth Dust mask Safety helmet Safety goggles Hand gloves Safety shoes

Set A: Practical Demonstration 2 – Observation Checklist

PRACTICAL DEMONSTRATION 2 – OBSERVATION CHECKLIST	
Candidate Name:	
Assessor Name:	
Qualification:	Certificate in Aluminium Fabrication and Installation
Task:	Fabricate and install aluminium door and glass
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	☐	☐
Determined application of tools to job requirements	☐	☐
Prepared hand and power tools	☐	☐
Used appropriate hand tool for the job	☐	☐
Applied proper and safe use/operation of hand tools	☐	☐
Used power tools safely in accordance to manufacturer's specification	☐	☐
Selected appropriate measuring device for the job	☐	☐
Prepared measuring device	☐	☐
Calculated material quantities	☐	☐

Interpreted and communicated results to appropriate authority	☐	☐
Checked and calibrated measuring instruments	☐	☐
Finished cut ends of aluminium materials in accordance with workplace/work plan specification	☐	☐
Identified types/classification of aluminium profile in accordance with workplace plan/drawing and specifications	☐	☐
Measured aluminium profile/materials in accordance with work plan/drawing specifications	☐	☐
Cut aluminium profile/materials in accordance with work plan/drawing specifications	☐	☐
Identified types/classification of aluminium profile for door in accordance with workplace plan/drawing and specifications	☐	☐
Measured aluminium profile/materials in accordance with work plan/drawing specifications	☐	☐
Cut aluminium profile/materials in accordance with work plan/drawing specifications	☐	☐
Identified method of assembly of structure for doors in accordance with workplace plan/drawing specifications	☐	☐
Performed assembly of aluminium structure for doors in accordance with plans/drawings	☐	☐
Installed aluminium door frame/structure on location in accordance with workplace requirement	☐	☐
Fixed aluminium window frame/structure on location in accordance with workplace requirements	☐	☐
Identified dimensions of aluminium doors in accordance with workplace plan/drawing and specifications	☐	☐
Identified types/classification of aluminium profile for door in accordance with workplace plan/drawing and specifications	☐	☐
Identified type of glass and size to be installed in accordance with work plan/drawing specification	☐	☐
Cut glasses to specified dimension in accordance with work plan/drawing specification	☐	☐
Installed glasses into the aluminium window frame/structure safely and in accordance with workplace requirement	☐	☐
Cleaned work area in accordance with workplace requirements	☐	☐
Stored tools, equipment and PPE's in accordance with workplace policy	☐	☐
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 Aluminium Fabrication and Installation
Task:	Fabricate and install aluminium partition and glass
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 Aluminium Fabrication and Installation
- 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 PPE, tools, equipment, aluminium profile materials and glass.
2. Check the usability of PPE, tools, equipment, aluminium profile materials and glass.
3. Carry out measurements, mark and cut aluminium profile materials and glass using appropriate tools.
4. Fabricate aluminium frame and install on selected place.
5. Fix the glass in the aluminium frame.
6. Report to Assessor for final evaluation.
7. Clean tools, equipment and workplace, and restore tools, equipment and excess materials properly.

Drawing, Plan, Diagram or Sketch

The picture given below is how the expected output should look like. You must observe:

- Accuracy of measurements
- Uniformity of ends
- Exactness of cuts of the aluminium frame
- Fitted to the location for installation

You are given total of two (2) hours for the following:

- Collection of tools, relevant materials & resources
- For measurements
- For cutting
- For joining the frame
- For installation
- For cleaning the works

(Ensure that you have avoided waste of materials during cutting)

Aluminium glazed partition:

Size of partition is 1.00m x 2.0m
Operation type is fixed
All sides leak proof

Tolerance in partition/wall frame:

- Length ±1.5mm
- Straightness ±1.5mm
- Accuracy on angles ±2°
- Accuracy on sides ±1mm
- Accuracy on diagonals ±2mm

Tolerance in glass panel:

- Height ±2mm
- Width ±2mm
- Straightness of edges ±1mm

Resources Required:	
Tools:	Hack saw with blade Ball peen hammer Plastic hammer Measuring tape Steel rule Tri-square Spirit level Combination pliers Plumb bob Screw drivers Sealant gun Rivet gun (Riveter)
Equipment:	Aluminium profile cutting machine Deburring machine Power drill with drill bits
Machinery:	N/A
Materials:	Aluminium profile materials Glass Sealer Other accessories
PPE:	Apron/Safety cloth Dust mask Safety helmet Safety goggles Hand gloves Safety shoes

Set B: Practical Demonstration 1 – Observation Checklist

PRACTICAL DEMONSTRATION 1 – OBSERVATION CHECKLIST	
Candidate Name:	
Assessor Name:	
Qualification:	Certificate in Aluminium Fabrication and Installation
Task:	Fabricate and install aluminium partition and glass
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	☐	☐
Determined application of tools to job requirements	☐	☐
Prepared hand and power tools	☐	☐
Used appropriate hand tool for the job	☐	☐
Applied proper and safe use/operation of hand tools	☐	☐
Used power tools safely in accordance to manufacturer's specification	☐	☐
Selected appropriate measuring device for the job	☐	☐
Prepared measuring device	☐	☐
Calculated material quantities	☐	☐
Interpreted and communicated results to appropriate authority	☐	☐

Checked and calibrated measuring instruments	☐	☐
Finished cut ends of aluminium materials in accordance with workplace/work plan specification	☐	☐
Identified types/classification of aluminium profile in accordance with workplace plan/drawing and specifications	☐	☐
Measured aluminium profile/materials in accordance with work plan/drawing specifications	☐	☐
Cut aluminium profile/materials in accordance with work plan/drawing specifications	☐	☐
Identified method of assembly of structure for partition in accordance with workplace plan/drawing specifications	☐	☐
Performed assembly of aluminium structure for partition in accordance with plans/drawings	☐	☐
Installed aluminium partition frame/structure on location in accordance with workplace requirement	☐	☐
Fixed aluminium partition frame/structure on location in accordance with workplace requirements	☐	☐
Identified type of glass and size to be installed in accordance with work plan/drawing specification	☐	☐
Cut glasses to specified dimension in accordance with work plan/drawing specification	☐	☐
Installed glasses into the aluminium partition frame/structure safely and in accordance with workplace requirements	☐	☐
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 Aluminium Fabrication and Installation
Task:	Fabricate and install aluminium false ceiling
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 Aluminium Fabrication and Installation
- 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 PPE, tools, equipment, aluminium profile materials and ceiling board.
2. Check the usability of PPE, tools, equipment, aluminium profile materials and ceiling board.
3. Carry out measurements, mark and cut aluminium profile materials and ceiling board using appropriate tools.
4. Fabricate aluminium frame and install on selected place.
5. Fix the ceiling board in the aluminium frame.
6. Report to Assessor for final evaluation.
7. Clean tools, equipment and workplace, and restore tools, equipment and excess materials properly.

Drawing, Plan, Diagram or Sketch

The picture given below is how the expected output should look like. You must observe:

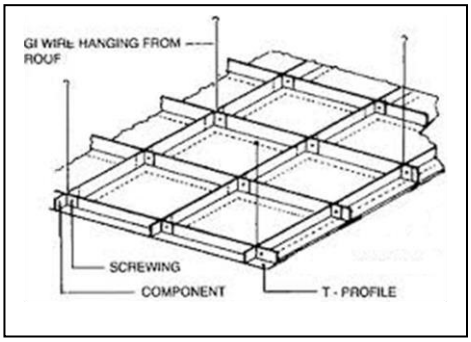
- Accuracy of measurements
- Squareness and uniformity of ends
- Exactness of cuts of the aluminium frame
- Fitted to the location for installation

You are given total of two (2) hours for the following:

- Collection of tools, relevant materials & resources
- For measurements
- For cutting
- For joining the frame
- For installation
- For cleaning the works

(Ensure that you have avoided waste of materials during cutting)

Aluminium false ceiling:
Size of false ceiling:4'-0" x 4'-0"
Size of ceiling boar: 2'-0" x 2'-0"
Suspended from ceiling: 6 inches
Place of location: corner



Tolerance in aluminium frame:

- Length ±1.5mm
- Straightness ±1.5mm
- Accuracy on angles ±2°
- Accuracy on sides ±1mm
- Accuracy on diagonals ±2mm

Resources Required:	
Tools:	Hack saw with blade Ball peen hammer Plastic hammer Measuring tape Steel rule Tri-square Spirit level Combination pliers Plumb bob Screw drivers Sealant gun Rivet gun (Riveter)
Equipment:	Aluminium profile cutting machine Deburring machine Power drill with drill bits
Machinery:	N/A
Materials:	Aluminium profile materials Ceiling board (2'-0" x 2'-0") Other accessories
PPE:	Apron/Safety cloth Dust mask Safety goggles Hand gloves Safety shoes

Set B: Practical Demonstration 2 – Observation Checklist

PRACTICAL DEMONSTRATION 2 – OBSERVATION CHECKLIST	
Candidate Name:	
Assessor Name:	
Qualification:	Certificate in Aluminium Fabrication and Installation
Task:	Fabricate and install aluminium false ceiling
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	☐	☐
Determined application of tools to job requirements	☐	☐
Prepared hand and power tools	☐	☐
Used appropriate hand tool for the job	☐	☐
Applied proper and safe use/operation of hand tools	☐	☐
Used power tools safely in accordance to manufacturer's specification	☐	☐
Selected appropriate measuring device for the job	☐	☐
Prepared measuring device	☐	☐
Calculated material quantities	☐	☐
Interpreted and communicated results to appropriate authority	☐	☐

Checked and calibrated measuring instruments	☐	☐
Finished cut ends of aluminium materials in accordance with workplace/work plan specification	☐	☐
Identified types/classification of aluminium profile in accordance with workplace plan/drawing and specifications	☐	☐
Measured aluminium profile/materials in accordance with work plan/drawing specifications	☐	☐
Cut aluminium profile/materials in accordance with work plan/drawing specifications	☐	☐
Identified method of assembly of structure for false ceiling in accordance with workplace plan/drawing specifications	☐	☐
Performed assembly of aluminium structure for false ceiling in accordance with plans/drawings	☐	☐
Installed aluminium false ceiling frame/structure on location in accordance with workplace requirement	☐	☐
Fixed aluminium false ceiling frame/structure on location in accordance with workplace requirements	☐	☐
Identified type of ceiling board and size to be installed in accordance with work plan/drawing specification	☐	☐
Cut ceiling board to specified dimension in accordance with work plan/drawing specification	☐	☐
Installed ceiling boards into the aluminium false ceiling frame/structure safely and in accordance with workplace requirements	☐	☐
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 1

PRACTICAL DEMONSTRATION 1	
Candidate Name:	
Assessor Name:	
Qualification:	Certificate in Aluminium Fabrication and Installation
Task:	Fabricate and install aluminium window and glass (2.0m x 1.5m)
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 Aluminium Fabrication and Installation
- 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 PPE, tools, equipment, aluminium profile materials and glass.
2. Check the usability of PPE, tools, equipment, aluminium profile materials and glass.
3. Carry out measurements, mark and cut aluminium profile materials and glass using appropriate tools.
4. Fabricate aluminium frame and install on selected place.
5. Fix the glass in the aluminium frame.
6. Report to Assessor for final evaluation.
7. Clean tools, equipment and workplace, and restore tools, equipment and excess materials properly.

Drawing, Plan, Diagram or Sketch

The picture given below is how the expected output should look like. You must observe:

- Accuracy of measurements
- Uniformity of ends
- Exactness of cuts of the aluminium frame
- Fitted to the location for installation

You are given total of two (2) hours for the following:

- Collection of tools, relevant materials & resources
- For measurements
- For cutting
- For joining the frame
- For installation
- For cleaning the works

(Ensure that you have avoided waste of materials during cutting)

Aluminium glazed window:

Size of window is 2.0m x 1.5m
Operation type is sliding
Provide locking arrangements
All sides leak proof

Resources Required:	
Tools:	Hack saw with blade Ball peen hammer Plastic hammer Measuring tape Steel rule Tri-square Spirit level Combination pliers Plumb bob Screw drivers Sealant gun Rivet gun (Riveter)
Equipment:	Aluminium profile cutting machine Deburring machine Power drill with drill bits
Machinery:	N/A
Materials:	Aluminium profile materials Glass Sealer Other accessories
PPE:	Apron/Safety cloth Dust mask Safety helmet Safety goggles Hand gloves Safety shoes

Set C: Practical Demonstration 1 – Observation Checklist

PRACTICAL DEMONSTRATION 1 – OBSERVATION CHECKLIST	
Candidate Name:	
Assessor Name:	
Qualification:	Certificate in Aluminium Fabrication and Installation
Task:	Fabricate and install aluminium window and glass (2.0m x 1.5m)
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	☐	☐
Determined application of tools to job requirements	☐	☐
Prepared hand and power tools	☐	☐
Used appropriate hand tool for the job	☐	☐
Applied proper and safe use/operation of hand tools	☐	☐
Used power tools safely in accordance to manufacturer's specification	☐	☐
Selected appropriate measuring device for the job	☐	☐
Prepared measuring device	☐	☐
Calculated material quantities	☐	☐
Interpreted and communicated results to appropriate authority	☐	☐

Checked and calibrated measuring instruments	☐	☐
Finished cut ends of aluminium materials in accordance with workplace/work plan specification	☐	☐
Identified types/classification of aluminium profile in accordance with workplace plan/drawing and specifications	☐	☐
Measured aluminium profile/materials in accordance with work plan/drawing specifications	☐	☐
Cut aluminium profile/materials in accordance with work plan/drawing specifications	☐	☐
Identified method of assembly of structure for windows in accordance with workplace plan/drawing specifications	☐	☐
Performed assembly of aluminium structure for windows in accordance with plans/drawings	☐	☐
Installed aluminium window frame/structure on location in accordance with workplace requirement	☐	☐
Fixed aluminium window frame/structure on location in accordance with workplace requirements	☐	☐
Identified type of glass and size to be installed in accordance with work plan/drawing specification	☐	☐
Cut glasses to specified dimension in accordance with work plan/drawing specification	☐	☐
Installed glasses into the Aluminium window frame/structure safely and in accordance with workplace requirements	☐	☐
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 Aluminium Fabrication and Installation
Task:	Fabricate and install aluminium false ceiling
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 Aluminium Fabrication and Installation
- 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 PPE, tools, equipment, aluminium profile materials and ceiling board.
2. Check the usability of PPE, tools, equipment, aluminium profile materials and ceiling board.
3. Carry out measurements, mark and cut aluminium profile materials and ceiling board using appropriate tools.
4. Fabricate aluminium frame and install on selected place.
5. Fix the ceiling board in the aluminium frame.
6. Report to Assessor for final evaluation.
7. Clean tools, equipment and workplace, and restore tools, equipment and excess materials properly.

Drawing, Plan, Diagram or Sketch

The picture given below is how the expected output should look like. You must observe:

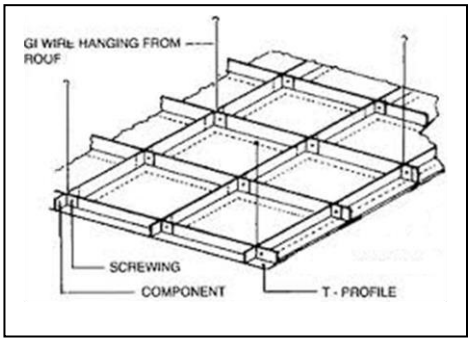
- Accuracy of measurements
- Squareness and uniformity of ends
- Exactness of cuts of the aluminium frame
- Fitted to the location for installation

You are given total of two (2) hours for the following:

- Collection of tools, relevant materials & resources
- For measurements
- For cutting
- For joining the frame
- For installation
- For cleaning the works

(Ensure that you have avoided waste of materials during cutting)

Aluminium false ceiling:
Size of false ceiling:4'-0" x 4'-0"
Size of ceiling boar: 2'-0" x 2'-0"
Suspended from ceiling: 6 inches
Place of location: corner



Tolerance in aluminium frame:
Length ±1.5mm

- Straightness ±1.5mm
- Accuracy on angles ±2°
- Accuracy on sides ±1mm
- Accuracy on diagonals ±2mm

Resources Required:	
Tools:	Hack saw with blade Ball peen hammer Plastic hammer Measuring tape Steel rule Tri-square Spirit level Combination pliers Plumb bob Screw drivers Sealant gun Rivet gun (Riveter)
Equipment:	Aluminium profile cutting machine Deburring machine Power drill with drill bits
Machinery:	N/A
Materials:	Aluminium profile materials Ceiling board (2'-0" x 2'-0") Other accessories
PPE:	Apron/Safety cloth Dust mask Safety helmet Safety goggles Hand gloves Safety shoes

Set C: Practical Demonstration 2 – Observation Checklist

PRACTICAL DEMONSTRATION 2 – OBSERVATION CHECKLIST	
Candidate Name:	
Assessor Name:	
Qualification:	Certificate in Aluminium Fabrication and Installation
Task:	Fabricate and install aluminium false ceiling
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	☐	☐
Determined application of tools to job requirements	☐	☐
Prepared hand and power tools	☐	☐
Used appropriate hand tool for the job	☐	☐
Applied proper and safe use/operation of hand tools	☐	☐
Used power tools safely in accordance to manufacturer's specification	☐	☐
Selected appropriate measuring device for the job	☐	☐
Prepared measuring device	☐	☐
Calculated material quantities	☐	☐
Interpreted and communicated results to appropriate authority	☐	☐

Checked and calibrated measuring instruments	☐	☐
Finished cut ends of aluminium materials in accordance with workplace/work plan specification	☐	☐
Identified types/classification of aluminium profile in accordance with workplace plan/drawing and specifications	☐	☐
Measured aluminium profile/materials in accordance with work plan/drawing specifications	☐	☐
Cut aluminium profile/materials in accordance with work plan/drawing specifications	☐	☐
Identified method of assembly of structure for false ceiling in accordance with workplace plan/drawing specifications	☐	☐
Performed assembly of aluminium structure for false ceiling in accordance with plans/drawings	☐	☐
Installed aluminium false ceiling frame/structure on location in accordance with workplace requirement	☐	☐
Fixed aluminium false ceiling frame/structure on location in accordance with workplace requirements	☐	☐
Identified type of ceiling board and size to be installed in accordance with work plan/drawing specification	☐	☐
Cut ceiling board to specified dimension in accordance with work plan/drawing specification	☐	☐
Installed ceiling boards into the aluminium false ceiling frame/structure safely and in accordance with workplace requirements	☐	☐
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:**	

Oral Question (Optional)

ORAL QUESTIONS - INSTRUCTIONS	
Candidate Name:	
Assessor Name:	
Qualification:	Certificate in Aluminium Fabrication and Installation
Unit of Competency	
Generic Competencies	
SEIP-CON-ALU-01-G	Perform computations using basic mathematical concepts
SEIP-CON-ALU-02-G	Apply occupational health and safety (OHS) practices in the workplace
SEIP-CON-ALU-03-G	Communicate in English in the workplace
SEIP-CON-ALU-04-G	Operate in a self-directed team
Sector-specific Competencies	
SEIP-CON-ALU-01-S	Translate drawings, plans and specifications
SEIP-CON-ALU-02-S	Work with hand tools and power tools
SEIP-CON-ALU-03-S	Carry-out measurements and calculations
Occupation-specific Competencies	
SEIP-CON-ALU-01-O	Explain fundamentals of aluminium materials and processes
SEIP-CON-ALU-02-O	Cut aluminium profile materials
SEIP-CON-ALU-03-O	Fabricate and install aluminium windows and glass
SEIP-CON-ALU-04-O	Fabricate and install aluminium doors and glass
SEIP-CON-ALU-05-O	Fabricate and install aluminium partition and glass
SEIP-CON-ALU-06-O	Fabricate and install aluminium false ceiling
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.	The unit of measurement use for glass works is	☐	☐
5.	Which is necessary for dust protection and will help to prevent inhalation of harmful particulates in the workplace?	☐	☐
6.	Give some examples of visual aids	☐	☐
7.	What are your duties and responsibilities as an Aluminium fabrication and installation worker?	☐	☐
8.	What is a riveter or rivet gun?	☐	☐
9.	What are the measuring devices you will need to work in aluminium fabrication and installation works?	☐	☐
10.	Is the aluminium appropriate for welding activity?	☐	☐
11.	Is the aluminium dust combustible?	☐	☐
12.	What are the methods of assembling the aluminium windows?	☐	☐
13.	Does tinted glass of window reduce heat?	☐	☐
14.	What is brazing? .	☐	☐
15.	What is the difference among the welding, brazing and soldering in consideration with temperature?	☐	☐
16.	What are the appropriate processes of finish when cut ends of aluminium materials? .	☐	☐
17.	What is gasket?	☐	☐
18.	What is a window frame?	☐	☐
19.	What is called head?	☐	☐
20.	Which are known as jambs?	☐	☐

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.	The unit of measurement use for glass works is	***Square meter or square foot***
5.	Which is necessary for dust protection and will help to prevent inhalation of harmful particulates in the workplace?	***Face mask***
6	Give some examples of visual aids	***Maps, diagrams, forms, labels, graphs, charts etc.***
7	What are your duties and responsibilities as an aluminium fabrication and installation worker?	• ***Awareness of and practice safety*** • ***Awareness of use of proper tools, equipment and materials*** • ***Perform aluminium fabrication and installation works*** • ***Responsible use of tools, equipment and materials***
8.	What is a riveter or rivet gun?	***A riveter or rivet gun is a type of tool used to drive rivets.***
9.	What are the measuring devices you will need to work in aluminium fabrication and installation works?	***Set square, Tri-square, micrometre, slide callipers, steel rule, steel tape, steel protractor.***
10.	Is the aluminium appropriate for welding activity?	***Difficult to weld and needs special welding methods.***
11.	Is the aluminium dust combustible?	***Yes - the aluminium dust is combustible.***
12.	What are the methods of assembling the aluminium windows?	***The methods are riveting, mechanical interlocking, metal screwing, using nut-bolts, welding and brazing.***

13.	Does tinted glass of window reduce heat?	***Yes - window tinted glass reduces thermal rays and therefore heat.***
14.	What is brazing? .	***Brazing is a metal-joining process in which two or more metal items are joined together by melting and flowing a filler metal into the joint, the filler metal having a lower melting point than the adjoining metal.***
15.	What is the difference among the welding, brazing and soldering in consideration with temperature?	***Soldering done at low temperatures, brazing in the middle and welding at the highest temperature.***
16.	What are the appropriate processes of finish when cut ends of aluminium materials?	***Debarring, filing, chamfering, and mitering***
17.	What is gasket?	***A gasket is a mechanical seal which fills the space between two or more mating surfaces, generally to prevent leakage from or into the joined objects while under compression.***
18.	What is a window frame?	***The framework that surrounds and supports the entire window system – comprised of the head, jamb and sill.***
19.	What is called head?	***The main horizontal part forming the top of the frame is called head.***
20.	Which are known as jambs?	***The main vertical parts forming the sides of a frame are known as jambs.***

Assessment Evidence Summary Sheet

EVIDENCE SUMMARY SHEET			
Candidate Name:			
Assessor Name:			
Qualification:	Certificate in Aluminium Fabrication and Installation		
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 Aluminium Fabrication and Installation		
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 and 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-ALU-01-G Perform computations using basic mathematical concepts		
Element	**Assessment Method**		
	Written	**Practical**	**Oral**
Identify calculation requirements in the workplace.	1	A1-2, B1-2, C1-2	
Select appropriate mathematical methods/concepts for the calculation.	1	A1-2, B1-2, C1-2	
Unit of Competency:	SEIP-CON-ALU-02-G Apply occupational health and safety (OHS) practices in the workplace		
Element	**Assessment Method**		
	Written	**Practical**	**Oral**
Identify OHS policies and procedures.	2, 9, 13	A1-2, B1-2, C1-2	1, 5
Apply personal health and safety practices.	2, 12, 13	A1-2, B1-2, C1-2	
Respond to emergencies.		A1-2, B1-2, C1-2	1, 5
Unit of Competency:	SEIP-CON-ALU-03-G Communicate in English in the workplace		
Element	**Assessment Method**		
	Written	**Practical**	**Oral**
Read and understand workplace documents in English.			2, 3, 6
Listen and comprehend to English conversations.	11	A1-2, B1-2, C1-2	
Unit of Competency:	SEIP-CON-ALU-04-G Work in a self-directed team		
Element	**Assessment Method**		

	Written	Practical	Oral
Identify team goals and work processes.	10		7
Communicate and cooperate with team members.		A1-2, B1-2, C1-2	7
Work as a team member.	3, 10	A1-2, B1-2, C1-2	

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

Element	**Assessment Method**		
	Written	**Practical**	**Oral**
Carry out basic engineering drawings applied in construction.		A1-2, B1-2, C1-2	
Access information from manuals, designs and plans.	6		

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

Element	**Assessment Method**		
	Written	**Practical**	**Oral**
Inspect hand tools and power tools for usability.	4	A1-2, B1-2, C1-2	8
Use hand tools properly and safely.		A1-2, B1-2, C1-2	4
Operate power tools properly and safely.		A1-2, B1-2, C1-2	
Clean/maintain hand tools and power tools after use.		A1-2, B1-2, C1-2	

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

Element	**Assessment Method**		
	Written	**Practical**	**Oral**
Check usability of measuring devices.		A1-2, B1-2, C1-2	
Carry out accurate construction work measurements.	5	A1-2, B1-2, C1-2	4, 9

Execute simple construction work calculations.		A1-2, B1-2, C1-2	
Clean and maintain measuring instruments.		A1-2, B1-2, C1-2	

Unit of Competency:	SEIP-CON-ALU-01-O Explain fundamentals of aluminium materials and processes

Element	**Assessment Evidence Method**		
	Written	**Practical**	**Oral**
Describe the properties of aluminium materials.	8, 16, 19		10, 11
Identify the fabrication processes for aluminium profiles.	15		14, 15

Unit of Competency:	SEIP-CON-ALU-02-O Cut aluminium profile materials

Element	**Assessment Method**		
	Written	**Practical**	**Oral**
Perform cutting of aluminium materials.		A1-2, B1-2, C1-2	
Finish cut ends of aluminium materials.	14, 17	A1-2, B1-2, C1-2	16

Unit of Competency:	SEIP-CON-ALU-03-O Fabricate and install aluminium windows and glass

Element	**Assessment Method**		
	Written	**Practical**	**Oral**
Identify work requirements.		A1, C1	18, 19, 20
Fabricate aluminium structure for windows.	14, 17	A1, C1	12, 16, 17
Install aluminium windows and glass.	7, 18	A1, C1	13, 15
Clean and maintain tools, equipment and work area.		A1, C1	

Unit of Competency:	SEIP-CON-ALU-04-O Fabricate and install aluminium doors and glass

Element	**Assessment Method**		
	Written	**Practical**	**Oral**
Identify work requirements.		A2, C2	19, 20
Fabricate aluminium structure for doors.	14, 17	A2, C2	16, 17

Install aluminium doors and glass.	7	A2, C2	15
Clean and maintain tools, equipment and work area.		A2, C2	

Unit of Competency:	SEIP-CON-ALU-05-O Fabricate and install aluminium partition and glass		
Element	**Assessment Method**		
	Written	**Practical**	**Oral**
Identify work requirements.		B1	19, 20
Fabricate aluminium structure for glass partition/wall.	14, 17	B1	16, 17
Install aluminium partition/wall and glass.	7	B1	15

Unit of Competency:	SEIP-CON-ALU-06-O Fabricate and install aluminium false ceiling		
Element	**Assessment Method**		
	Written	**Practical**	**Oral**
Fabricate aluminium structure for false ceiling.	14, 17, 20	B2	16, 17
Install aluminium structure for false ceiling and board.		B2	15