COMPETENCY STANDARDS & ASSESSMENT GUIDE
FOR

ALUMINUM FABRICATION AND INSTALLATION

Skills for Employment Investment Program (SEIP)
Finance Division, Ministry of Finance

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INTRODUCTION:

The Skills for Employment Investment Program (SEIP) Project of the Finance Division of the Ministry of Finance has embarked on a project which aims to qualitatively and quantitatively expand the skilling capacity of identified public and private training providers by establishing and operationalizing a responsive skill eco system and delivery mechanism through a combination of well-defined set of funding triggers and targeted capacity support.

Among the many components of the project, one is to promote a Market Responsive Inclusive Skills Training Delivery program. Key priority economic growth sectors identified by government have been targeted by the project to improve current job skills along with up-skilling of the existing workforce to ensure 'required skills to industry standards'. Training providers are encouraged and supported to work with the industry to address identified skills to enable industry growth and increased employment through the provision of market responsive inclusive skills training programs. Priority sectors were identified to adopt a demand driven approach to training with effective inputs from Industry Skills Councils (ISCs), Employer Associations and Employers.

This document is developed to improve skills in accordance with the job roles and skill sets of the occupation and ensure that the required skills are aligned to industry requirements.

The document details the format, sequencing, wording and layout of the Competency Standard for an occupation which comprised Units of Competence and its corresponding Elements.

OVERVIEW:

A **Competency Standard** is a written specification of the knowledge, skills and attitudes required for the performance of a job or occupation or trade corresponding to the standard of performance required in the workplace.

Competency standard:

- provides a consistent and reliable set of components for training, recognizing and assessing people's skills, and may also have optional support materials.
- enables industry recognized qualifications to be awarded through direct assessment of workplace competencies
- encourages the development and delivery of flexible training which suits individual and industry requirements
- encourages learning and assessment in a work-related environment which leads to verifiable workplace outcomes.

Competency Standards are developed by a working group who comprised national and international process experts and the participation of experts from the industry to identify the competencies required of an occupation in a particular sector.

Competency Standards describe the skills, knowledge and attitude needed to perform effectively in the workplace. Competency Standards acknowledge that people can achieve vocational and technical competency in many ways by emphasizing what the learner can do, not how or where they learned to do it.

With Competency Standards, training and assessment may be conducted at the workplace rat training organization or any combination of these.

A Unit of Competency describes a distinct work activity that would normally be undertaken by one person in accordance with industry standards.

Units of Competency are documented in a standard format that comprises:

- Reference to Industry Sector, Occupational Title and Occupational Description
- Unit code
- Unit title
- Unit descriptor
- Unit of Competency
- Elements and performance criteria
- Variables and range statement
- Evidence guides

Together all the parts of a Unit of Competency:

- Describe a work activity
- Guide the assessor in determining whether the candidate is competent.

Identification and validation of units of competency and elements for each occupation were made by experts of various construction companies in an industry consultative workshop held at the Bangladesh Association of Construction Industry (BACI) on the 29th of May 2016.

Profile of experts and facilitators who participated in the Competency Verification and Validation Workshop are given below:

Competency Verification-Validation Experts:

Name	Company	Job Position
Mr. Moniruzzaman Sani	Montage Training Center	Master Aluminum Fabricator/Installer
Md. Rakibul Hassan	MAWTS, Pallbi, Mirpur	Asst. Instructor
Md. Abdul Mannan	Bangladesh-German Technical Training Center	Instructor (Auto Cad)
Jannati Sultana	Royal CNC Training Institute	Architect
Engr. Faridul Islam	Montage Training Center	Instructor
Engr. Md. Alauddin Khelze	MAWTS, Pallabi Mirpur	Chief Instructor

Workshop Facilitators:

Md Ahasan Habib	SEIP	TVET Specialist
Md. Mohiuzzaman	SEIP	Course Specialist
Emeterio Cedillo, Jr.	SEIP	International Specialist
Mr. Md. Atiar Rahman	SEIP	National Specialist

The ensuing sections of this document comprise a description of the respective occupation with all the key components of a Unit of Competency:

- A chart with an overview of all Units of Competency for the respective occupation including the Unit Codes and the Unit of Competency titles and corresponding Elements.

- The Competency Standards that include the Unit of Competency, Unit Descriptor, Elements and Performance Criteria, Range of Variables, Curricular Content Guide and Assessment Evidence Guide.

COMPETENCY PROFILE/MAP FOR
ALUMINUM FABRICATION AND INSTALLATION

UNITS OF COMPETENCY	ELEMENTS			
A. Generic (Basic) Competencies				
PERFORM COMPUTATIONS USING BASIC MATHEMATICAL CONCEPTS (SEIP-CON-ALU-1-G)	Identify calculation requirements in the workplace.	Select appropriate mathematical methods/concepts for the calculation	Use tool/instrument to perform calculations	
APPLY OCCUPATIONAL HEALTH AND SAFETY (OHS) PRACTICES IN THE WORKPLACE (SEIP-CON-ALU-2-G)	Identify OHS policies and procedures	Apply personal health and safety practices	Report hazards and risks	Respond to emergencies
COMMUNICATE IN ENGLISH IN THE WORKPLACE (SEIP-CON-ALU-3-G)	Read and understand workplace documents in English	Write simple workplace written communications in English.	Listen and comprehend to English conversation	Perform conversations in English language
OPERATE IN A SELF-DIRECTED TEAM. (SEIP-CON-ALU-4-G)	Identify team goals and processes.	Communicate and cooperate with team members.	Work as a team member	Solve problems as a team member
B. Sector Specific (Common) Competencies				
TRANSLATE DRAWINGS, PLANS AND SPECIFICATIONS (SEIP-CON-ALU-1-S)	Carry out basic engineering drawings applied in construction	Access information from manuals, designs and plans	Interpret drawings and specifications from manuals, designs and plans	Store manuals, designs and plans
WORK WITH HAND TOOLS AND POWER TOOLS (SEIP-CON-ALU-2-S)	Inspect hand tools and power tools for usability	Use hand tools properly and safely	Operate power tools properly and safely	Clean/maintain hand tools and power tools after use
CARRY OUT MEASUREMENTS AND CALCULATIONS (SEIP-CON-ALU-3-S)	Check usability of measuring devices	Carry out accurate construction work measurements	Execute simple construction work calculations	Clean and maintain measuring instruments
C. Occupation Specific (Core) Competencies				
EXPLAIN FUNDAMENTALS OF ALUMINUM MATERIALS AND PROCESSES (SEIP-CON-ALU-1-O)	Describe the properties of Aluminum materials	Identify the fabrication processes for Aluminum profiles		

CUT ALUMINUM PROFILE MATERIALS (SEIP-CON-ALU-2-O)	Prepare machines and work area for safe operation	Perform cutting of Aluminum materials	Finish cut ends of Aluminum materials	Clean and maintain tools. equipment and work area.
FABRICATE AND INSTALL ALUMINUM WINDOWS AND GLASS (SEIP-CON-ALU-3-O)	Identify work requirements	Prepare for work	Fabricate Aluminum structure for windows	Install Aluminum windows and glass
	Clean and maintain tools, equipment and work area			
FABRICATE AND INSTALL ALUMINUM DOORS AND GLASS (SEIP-CON-ALU-4-O)	Identify work requirements	Prepare for work	Fabricate Aluminum structure for doors	Install Aluminum door and glass
	Clean and maintain tools, equipment and work area			
FABRICATE AND INSTALL ALUMINUM PARTITION AND GLASS (SEIP-CON-ALU-5-O)	Identify work requirements	Prepare for work	Fabricate Aluminum structure for glass partition/wall	Install Aluminum partition/wall and glass
	Clean and maintain tools, equipment and work area.			
FABRICATE AND INSTALL ALUMINUM FASE CEILING (SEIP-CON-ALU-6-O)	Identify work requirements	Prepare for work	Fabricate Aluminum structure for false ceiling	Install Aluminum structure for false ceiling and board
	Clean and maintain tools, equipment and work area.			

Units & Elements at Glance:

A. Generic (Basic) Competencies (46 hrs.)

Code	Unit of Competency	Elements of Competency	Duration (Hours)
SEIP-CON-ALU-1-G	Perform Computations Using Basic Mathematical Concepts	1. Identify calculation requirements in the workplace 2. Select appropriate mathematical methods/concepts for the calculation. 3. Use tool/instrument to perform calculations	14
SEIP-CON-ALU-2-G	Apply Occupational Health and Safety (OHS) Practices in the Workplace	1. Identify OHS policies and procedures 2. Apply personal health and safety practices 3. Report hazards and risks 4. Respond to emergencies	10
SEIP-CON-ALU-3-G	Communicate in English in the Workplace	1. Read and understand workplace documents in English 2. Write simple workplace communications in English 3. Listen and comprehend to English conversations 4. Perform conversations in English language	14
SEIP-CON-ALU-4-G	Operate in a Self-Directed Team	1. Identify team goals and work processes 2. Communicate and cooperate with team members. 3. Work as a team member. 4. Solve problems as a team member	8
Total Hour			**46**

B. Sector Specific (Common) Competencies (34 hrs.)

Code	Unit of Competency	Elements of Competency	Duration (Hours)
SEIP-CON-ALU-1-S	Translate Drawings, Plans and Specifications	1. Carry out basic engineering drawings applied in construction 2. Access information from manuals, designs and plans 3. Interpret drawings and specifications from manuals, designs and plans 4. Store manuals, designs and plans	10

SEIP-CON-ALU-2-S	Work With Hand Tools and Power Tools	1. Inspect hand tools and power tools for usability 2. Use hand tools properly and safely 3. Operate power tools properly and safely 4. Clean/maintain hand tools and power tools after use	10
SEIP-CON-ALU-3-S	Carry Out Measurements and Calculations	1. Check usability of measuring devices 2. Carry out accurate construction work measurements 3. Execute simple construction work calculations 4. Clean and maintain measuring instruments	14
Total Hours			**34**

C. Occupation Specific (Core) Competencies (280hrs.)

Code	Unit of Competency	Elements of Competency	Guided Learning Hours
SEIP-CON-ALU-1-O	Explain Fundamentals of Aluminum Materials and Processes	1. Describe the properties of Aluminum materials 2. Identify the fabrication processes for Aluminum profiles	24
SEIP-CON-ALU-2-O	Cut Aluminum Profile Materials	1. Prepare machines and work area for safe operation 2. Perform cutting of Aluminum materials 3. Finish cut ends of Aluminum materials 4. Clean and maintain tools. equipment and work area.	40
SEIP-CON-ALU-3-O	Fabricate and Install Aluminum Windows and Glass	1. Identify work requirements 2. Prepare for work 3. Fabricate Aluminum structure for windows 4. Install Aluminum windows and glass. 5. Clean and maintain tools, equipment and work area	56
SEIP-CON-ALU-4-O	Fabricate and Install Aluminum Doors and Glass	1. Identify work requirements 2. Prepare for work 3. Fabricate Aluminum structure for doors 4. Install Aluminum door and glass. 5. Clean and maintain tools, equipment and work area	56

SEIP-CON-ALU-5-O	Fabricate and Install Aluminum Partition and Glass	1. Identify work requirements 2. Prepare for work 3. Fabricate Aluminum structure for glass partition/wall 4. Install Aluminum partition/wall and glass. 5. Clean and maintain tools, equipment and work area	56
SEIP-CON-ALU-6-O	Fabricate and Install Aluminum False Ceiling	1. Identify work requirements 2. Prepare for work 3. Fabricate Aluminum structure for false ceiling 4. Install Aluminum structure for false ceiling and board. 5. Clean and maintain tools, equipment and work area	48
Total Hours			**280**

COMPETENCY STANDARD: ALUMINUM FABRICATION AND INSTALLATION

A. The Generic (Basic Competencies)

Unit of Competency: **PERFORM COMPUTATIONS USING BASIC MATHEMATICAL CONCEPTS**	**Nominal Duration:** 14 hrs.	**Unit Code:** SEIP-CON-ALU-1-G
Unit Descriptor: This unit of competency requires the knowledge, skills and attitude to perform computations using basic mathematical concepts in the workplace. It specifically includes the tasks of identifying calculation requirements in the workplace, selecting appropriate mathematical method/concept for the calculation and using appropriate instruments tools to carry out calculation.		

Elements and Performance Criteria:
(Terms in the performance criteria that are written in **bold and underlined** are elaborated in the range of variables).

Elements of Competency	Performance Criteria
1. Identify calculation requirements in the workplace	1.1 **Calculation requirements** are identified from **workplace information.**
2. Select appropriate mathematical methods/concepts for the calculation.	2.1 **Appropriate method** is selected to carry out the calculation requirements.
3. Use tool/instrument to perform calculations	3.1 Calculations are completed using appropriate **tools and instruments.**

Range of variables:

Variable	Range May include but not limited to:
1. Calculation requirements.	1.1 Area 1.2 Height 1.3 Length/Breath/thickness 1.4 Diameter 1.5 Weight 1.6 Capacity 1.7 Time 1.8 Temperature. 1.9 Material usage 1.10 Speed 1.11 Costing 1.12 Mass 1.13 Density
2. Workplace information	2.1 Mechanical Plan 2.2 Design 2.3 Working drawing

	2.4 Verbal instructions 2.5 Job order
3. Appropriate method	3.1 Addition 3.2 Subtraction 3.3 Division 3.4 Multiplication 3.5 Conversion 3.6 Percentage and ratio calculation 3.7 Simple equation
4. Tools/instruments	4.1 Calculator 4.2 Computer

Curricular Content Guide

1. Underpinning Knowledge	1.1 Numerical concept 1.2 Basic mathematical methods such as addition, subtraction, multiplication and division and percentages. 1.3 Mathematical language, symbols and terminology. 1.4 Measuring units 1.5 Knowledge of computer application
2. Underpinning Skills	2.1 Adding numbers 2.2 Subtracting numbers 2.3 Multiplying numbers 2.4 Dividing numbers 2.5 Measuring of linear 2.6 Using of mathematical language, symbols, terminology and technology 2.7 Measuring of different physical parameter 2.8 Calculating geometrical parameters: angle, parallelism, perpendicularity, area and volume
3. Underpinning Attitudes	3.1 Commitment to occupational health and safety practices 3.2 Promptness in carrying out activities 3.3 Tidiness and timeliness 3.4 Respect to peers, sub-ordinates and seniors in workplace 3.5 Environmental concern 3.6 Sincerity and honesty
4. Resource Implications	The following resources must be provided. 4.1 Stationeries 4.2 Consumables 4.3 Calculators 4.4 Computers 4.5 Measuring tape

Assessment Evidence Guide

1. Critical Aspects of Competency	Assessment required evidence that the candidate: 1.1 Identified calculation requirements from workplace information.

	1.2 Selected appropriate method to carry out the calculation requirements. 1.3 Completed calculations using appropriate tools/instruments.
2. Methods of Assessment	Methods of assessment may include but not limited to: 2.1 Written test 2.2 Oral questioning 2.3 Demonstration.
5. Context of Assessment	3.1 Competency assessment must be done in a training center or in an actual or simulated work place after completion of the training module.

Unit of Competency: **APPLY OCCUPATIONAL HEALTH AND SAFETY (OHS) PRACTICES IN THE WORKPLACE**	**Nominal Duration:** 10 hrs.	**Unit Code:** SEIP-CON-ALU-2-G
Unit Descriptor: This unit covers the knowledge, skills and attitudes required to apply occupational health and safety (OH&S) practices in the workplace. It specifically includes the tasks of identifying OHS policies and procedures, applying personal health and safety practices, reporting hazards and risks and responding to emergencies.		

Elements and Performance Criteria:

(Terms in the performance criteria that are written in **bold and underlined** are elaborated in the range of variables).

Elements of Competency	Performance Criteria
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 (PPE)** 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.

Range of Variables

Variable	Range May include but not limited to:
1. OHS policies	1.1 International OHS requirements 1.2 Bangladesh standards for OHS 1.3 Building Code 1.4 Fire Safety Rules and Regulations 1.5 Industry Guidelines
2. Personal Protective Equipment (PPE)	2.1 Apron 2.2 Gas Mask 2.3 Gloves 2.4 Safety shoes 2.5 Helmet 2.6 Face mask 2.7 Overalls

	2.8 Goggles and safety glasses 2.9 Ear plugs 2.10 Sun block 2.11 Chemical/Gas masks
3. Hazards and risks	3.1 Chemical hazards. 3.2 Biological hazards. 3.3 Physical Hazards. 3.3.1 Machine hazards. 3.3.2 Materials hazards. 3.3.3 Tools and Equipment hazards.
4. Emergency response plans and procedures	4.1 Firefighting procedures 4.2 Earthquake response procedures 4.3 Evacuation procedures 4.4 Medical and first aid
5. First aid procedure	5.1 Washing of open wound 5.2 Washing chemically infected area 5.3 Applying bandage 5.4 Tourniquet 5.5 Applying CPR (Cardiopulmonary Resuscitation) 5.6 Taking appropriate medicine

Curricular Evidence Guide:

1. Underpinning Knowledge	1.1 OHS workplace policies and procedures. 1.2 Work safety procedures. 1.3 Emergency procedures. 1.3.1 Firefighting. 1.3.2 Earthquake response. 1.3.3 Explosion response. 1.3.4 Accident response. 1.4 Types of (biological, chemical and physical) and their effects. 1.5 PPE types and uses. 1.6 Personal hygiene practices. 1.7 OHS awareness.
2. Underpinning Skills	2.1 Identifying OHS policies and procedures 2.2 Following personal work safety practices 2.3 Reporting hazards and risks 2.4 Responding to emergency procedures 2.5 Maintaining physical well-being in the workplace 2.6 Performing first aids. 2.7 Performing basic firefighting accessories using fire extinguishers 2.8 Applying basic first aide procedures
3. Underpinning Attitudes	3.1 Commitment to occupational health and safety practices 3.2 Communication with peers, sub-ordinates and seniors in workplace. 3.3 Promptness in carrying out activities. 3.4 Tidiness and timeliness.

	3.5 Respect of peers, sub-ordinates and seniors in workplace. 3.6 Environmental concern. 3.7 Sincere and honest to duties
4. Resource Implications	4.1 Workplace (simulated or actual) 4.2 PPEs 4.3 Firefighting equipment 4.4 Emergency response manual 4.5 First aid kits

Assessment Evidence Guide:

1. Critical Aspects of Competency	Assessment required evidence that the candidate: 1.1 Followed OHS policies and procedures 1.2 Selected and used personal protective equipment (PPE) 1.3 Reported incidents arising from hazards and risks to authority 1.4 Emergency response plans and procedures are implemented 1.5 Applied basic first aide procedure
2. Methods of Assessment	Methods of assessment may include but not limited to: 2.1 Written test 2.2 Demonstration 2.3 Oral questioning 2.4 Interview
3. Context of Assessment	3.1 Competency assessment must be done in a training center or in an actual or simulated work place after completion of the training module.

Unit of Competency: **COMMUNICATE IN ENGLISH IN THE WORKPLACE**	**Nominal Duration:** 14 hrs.	**Unit Code:** SEIP-CON-ALU-3-G
Unit Descriptor: This unit covers the knowledge, skills and attitudes required to communicate in English in the workplace. It specifically includes work tasks of reading and understanding workplace documents in English, writing simple workplace written communications in English, listening and comprehending to English conversations and performing conversations in English.		

Elements and Performance Criteria:

(Terms in the performance criteria that are written in **bold and underlined** are elaborated in the range of variables).

Elements of Competency	Performance Criteria
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.

Range of Variables

Variable	Range May Include but not limited to:
1. Routine workplace documents	1.1 Agenda 1.2 Simple reports such as progress and incident reports 1.3 Job sheets 1.4 Operational manuals 1.5 Brochures and promotional material 1.6 Visual and graphic materials 1.7 Standards 1.8 OSH information 1.9 Signs
2. Visual aids	2.1 Maps 2.2 Diagrams 2.3 Forms 2.4 Labels 2.5 Graphs 2.6 Charts

Curricular Evidence Guide:

1. Underpinning Knowledge	1.1 Read workplace documents in English 1.2 Write simple routine workplace documents in English 1.3 Listen to conversation in English 1.4 Perform conversation in English 1.5 Interaction skills (i.e., teamwork, interpersonal skills, etc.) 1.6 Job roles, responsibilities and compliances
2. Underpinning Skills	2.1 Ability to read and understand workplace documents in English by using appropriate vocabulary and grammar, standard spelling and punctuation 2.2 Ability to write simple routine workplace documents in English such as: Schedules and agenda, job sheets, operational manuals and brochures and promotional material 2.3 Ability of listening in English and interpreting 2.4 Ability to perform conversation in English with peers, customers and management to the required workplace standard 2.5 Work effectively with others 2.5.1 Listening and questioning skills 2.5.2 Ability to follow simple directions
3. Underpinning Attitudes	3.1 Commitment to occupational health and safety practices 3.2 Promptness in carrying out activities 3.3 Tidiness and timeliness 3.4 Respect of peers, sub-ordinates and seniors in workplace 3.5 Environmental concern. 3.6 Sincere and honest to duties.
4. Resource Implications	The following resources must be provided: 4.1 Work place Procedure 4.2 Materials relevant to the proposed activity 4.3 All tools, equipment, material and documentation required. 4.4 Relevant specifications or work instructions

Assessment Evidence Guide:

1. Critical Aspects of Competency	Assessment required evidence that the candidate: 1.1 Conversed in English with peers and customers 1.2 Made reports of workplace documents in English
2. Methods of Assessment	Methods of assessment may include but not limited to: 2.1 Written test 2.2 Demonstration 2.3 Oral questioning 2.4 Interview
3. Context of Assessment	3.1 Competency assessment must be done in a training center or in an actual or simulated work place after completion of the training module.

Unit of Competency: **OPERATE IN A SELF-DIRECTED TEAM**	**Nominal Duration:** 8 hrs.	**Unit Code:** SEIP-CON-ALU-4-G
Unit Descriptor: This unit covers the knowledge, skills and attitudes required to operate in a self-directed team. It specifically includes work tasks of identifying team goals and work processes, communicating and cooperating with team members, working and solving problems as a team member.		

Elements and Performance Criteria:
(Terms in the performance criteria that are written in **bold and underlined** are elaborated in the range of variables).

Elements of Competency	Performance Criteria
1. Identify team goals and work processes	1.1 Team goals and collaborative decision making processes are identified. 1.2 Roles and responsibilities of team members are identified. 1.3 Relationships within team and with other workers are maintained.
2. Communicate and cooperate with team members.	2.1 Effective interpersonal skills are used to interact with team members and to contribute to activities and objectives. 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 organizational and team requirements, specifications and workplace procedures. 3.3 Team member's support with other members are made to ensure team achieves goals, awareness and requirements. 3.4 Agreed reporting lines are followed using standard operating procedure.
4. Solve problems as a 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.

Range of Variables

Variable	Range May Include but not limited to:
1. Forms of communication	1.1 Agenda 1.2 Simple reports such as progress and incident reports 1.3 Job sheets 1.4 Operational manuals

	1.5 Brochures and promotional material 1.6 Visual and graphic materials 1.7 Standards 1.8 OSH information 1.9 Signs

Curricular Evidence Guide:

1. Underpinning Knowledge	1.1 Team goals and collaborative decision making processes 1.2 Roles and responsibilities of team members 1.3 Relationships within team and with other workers 1.4 Effective interpersonal skills to interact with team members 1.5 Effective formal and informal forms of communication 1.6 Value of diversity in team functioning. 1.7 Correct use of workplace terminology 1.8 Team's duties, responsibilities, authorities, objectives and task requirements 1.9 Support mechanism to other members of team to ensure achievements of goals 1.10 Methods of identifying current and potential problems faced by a team 1.11 Effective problems solving methods and evaluation of outcomes
2. Underpinning Skills	2.1 Identifying team goals and collaborative decision making processes 2.2 Identifying roles and responsibilities of team members 2.3 Identifying relationships within team and with other workers 2.4 Using effective interpersonal skills to interact with team members and to contribute to activities and objectives 2.5 Using formal and informal forms of communication 2.6 Understanding and valuing views and opinions of other team members 2.7 Performing tasks in accordance with organizational and team requirements, specifications and workplace procedures 2.8 Supporting other members of the team to ensure team achieves goals, awareness and requirements 2.9 Identifying current and potential problems faced by the team 2.10 Identifying solutions to the problem 2.11 Solving problems effectively and evaluating the outcome of the implemented solution
3. Underpinning Attitudes	3.1 Teamwork 3.2 Promptness in carrying out activities 3.3 Tidiness and timeliness 3.4 Respect of peers, sub-ordinates and seniors in workplace 3.5 Sincere and honest to duties
4. Resource Implications	The following resources must be provided: 4.1 Workplace (simulated or actual) 4.2 Pens

	4.3 Papers 4.4 Work books 4.5 Learning manuals

Assessment Evidence Guide:

1. Critical Aspects of Competency	Assessment required evidence that the candidate: 1.1 Identified team goals and work processes 1.2 Communicated and cooperated with team members 1.3 Worked as a team member 1.4 Solved problems as a team member
2. Methods of Assessment	Methods of assessment may include but not limited to: 2.1 Written test 2.2 Demonstration 2.3 Oral questioning 2.4 Interview
3. Context of Assessment	3.1 Competency assessment must be done in a training center or in an actual or simulated work place after completion of the training module.

B. The Sector Specific (Common) Competencies

Unit of Competency: **TRANSLATEDRAWINGS, PLANS AND SPECIFICATIONS**	**Nominal Duration:** 10 hrs	**Unit Code:** SEIP-CON-ALU-1-S
Unit Descriptor: This unit covers the knowledge, skills and attitudes required to translate drawings, plans and specifications. It specifically includes the tasks of carry out basic engineering drawings applied in construction, accessing information from manuals, designs and plans, interpreting drawings and specifications from manuals, designs and plans and storing manuals, designs and plans.		

Elements and Performance Criteria Template:
(Terms in the performance criteria that are written in **bold and underlined** are described in the range of variables)

Elements of Competency	**Performance Criteria**
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** is 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	1.5 Appropriate **manuals** are identified and accessed. 1.6 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 from manuals, designs and plans	2.1 Relevant **drawings** and **specifications** are correctly recognized from manuals, designs and plans. 2.2 Terms and abbreviations are recognized. 2.3 **Signs and symbols** are interpreted.
4. Store manuals, designs and plans	3.1 Manuals, designs and plans are collected and packed. 3.2 Manuals, designs and plans are stored to prevent damage, and ready access and updating of information when required.

Range of Variables

Variable	**Range** (Includes but not limited to):
1. Shapes and objects	1.1 Lines 1.2 Geometrical shapes 1.3 Projections 1.4 Pictorial drawings 1.5 Isometric drawings
2. Manual drafting equipment	2.1 Pencils 2.2 Compass 2.3 Divider 2.4 Triangles

	2.5 French curve 2.6 Protractor 2.7 Eraser
3. Geometric shapes	3.1 Circle 3.2 Oval 3.3 Ellipse 3.4 Square 3.5 Rectangle 3.6 Polygons
4. Manuals	4.4 Manufacturer's Specification Manual 4.5 Repair Manual 4.6 Maintenance Procedure Manual 4.7 Periodic Maintenance Manual 4.8 Quality Manual 4.9 Instruction Manual
5. Drawings	5.1 Technical drawings 5.2 Sketches
6. Specifications	6.1 Product specifications 6.2 Performance specifications 6.3 Method specifications
7. Signs and symbols	7.1 Refers to all signs and symbols associated in the construction sector

Curricular Content Guide

1. Underpinning Knowledge	1.1 Methods and techniques of sketching/drawing of basic shapes and objects 1.2 Types and use of manual drafting equipment 1.3 Types of geometric shapes 1.4 Techniques of sketching using manual drafting equipment 1.5 Standard technical/engineering lettering 1.6 Types of construction manuals 1.7 Identification of signs and symbols 1.8 Identification of units of measurement 1.9 Identification of units of conversion 1.10 Drawings and specifications 1.11 Terms and abbreviations used
2. Underpinning Skills	2.1 Sketching/drawing of basic shapes and objects 2.2 Using of manual drafting equipment 2.3 Sketching using manual drafting equipment 2.4 Lettering using standard technical/engineering lettering 2.5 Checking version and date of the manual to ensure up-to-date specifications of tools, equipment, materials and procedures 2.6 Identifying relevant drawings and specifications correctly 2.7 Identifying terms and abbreviations 2.8 Identifying signs and symbols 2.9 Interpreting drawings and specifications

	2.10 Interpreting schedules, dimensions and specifications contained in the drawings 2.11 Storing manuals
3. Underpinning Attitudes	3.1 Eagerness to learn 3.2 Orderliness 3.3 Resourcefulness
4. Resource Implications	4.1 Workplace (simulated or actual) 4.2 Different types of construction manuals and literatures 4.3 Pens 4.4 Papers 4.5 Work books

Assessment Evidence Guide

1. Critical Aspects of Competency	Assessment required evidence that the candidate: 1.1 Sketched shapes and objects using manual drafting equipment 1.2 Checked version and date of manual to ensure up-to-date specifications of tools, equipment, materials and procedures 1.3 Identified relevant drawings and specifications correctly 1.4 Identified terms and abbreviations 1.5 Identified signs and symbols 1.6 Interpreted construction drawings and specifications 1.7 Interpreted schedules, dimensions and specifications contained in the drawings
2. Methods of Assessment	Competency should be assessed by: 2.1 Written examination 2.2 Demonstration 2.3 Oral questioning 2.4 Workplace observation 2.5 Portfolio
3. Context of Assessment	3.1 Competency assessment must be done in a training center or in an actual or simulated work place after completion of the training module.

Unit of Competency: **WORK WITH HAND TOOLS AND POWER TOOLS**	**Nominal Duration:** 10 hrs.	**Unit Code:** SEIP-CON-ALU-2-S
Unit Descriptor: This unit covers the knowledge, skills and attitudes required for a worker to work with hand tools and power tools properly and safely. It specifically includes the tasks of inspecting hand tools and power tools for usability, using hand tools properly and safely, operating power tools properly and safely and cleaning/maintaining hand tools and power tools after use.		

Elements and Performance Criteria:

(Terms in the performance criteria that are written in **bold and underlined** are elaborated in the range of variables).

Elements of Competency	Performance Criteria
1. Inspect hand tools and power tools for usability	1.1 Appropriate tools are selected. 1.2 Application of tools to job requirement 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** is 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.

Range of Variables

Variable	Range May include but not limited to:	
1. Hand tools	1.1 Adjustable spanners 1.2 Bars (crow and pitch) 1.3 Bench vise 1.4 Bolt cutters 1.5 C-clamp 1.6 Chisels	1.20 Pliers 1.21 Plumb bob 1.22 Punches 1.23 Scrapers 1.24 Screwdrivers 1.25 Sealant Gun

	1.7 Crosscut saws 1.8 Die and stock 1.9 Drill bits 1.10 Files of all cross-sectional shapes and types 1.11 Hacksaw 1.12 Ball peen Hammer 1.13 Plastic hammer 1.14 Hand drill 1.15 Hand saw 1.16 Measuring Tapes 1.17 Paint Brushes/Rollers 1.18 End cap crimper 1.19 Spirit level	1.26 Sockets 1.27 Spanners and Wrenches 1.28 String Lines 1.29 Taps 1.30 Vice grip 1.31 Wire Cutters 1.32 Scriber 1.33 Glass cutter (Diamond tip) 1.34 Tube cutter 1.35 Tube bender 1.36 Screw driver 1.37 Riveter 1.38 Snips 1.39 Glass File set
2. Power tools	2.1 Power drills 2.2 Angle grinders 2.3 Pedestal/bench grinder 2.4 Sander machine 2.5 Pedestal drills 2.6 Miter saw	
3. Safety precautions	3.1 Use of appropriate PPEs 3.2 Proper hand, feet and eye coordination 3.3 Safe condition of electrical outlets, cords and lamps 3.4 Working environment 3.5 Safe operating condition of hand tools and power tools 3.6 Awareness to OH&S requirements	
4. Measuring instruments	4.1 Measuring tape 4.2 Hose level 4.3 Water level 4.4 Caliper 4.5 Steel rule 4.6 Protractor 4.7 Tri-square 4.8 String	

Curricular Content Guide

1. Underpinning Knowledge	1.1 Types of tools, functions and use 1.2 Types of Hand tools and their proper use and techniques 1.3 Types of Power tools, use and safe handling method 1.4 Technical application of tools 1.5 Procedures in the use of hand tools and power tools 1.6 Policies and procedures for occupational health and safety 1.7 Use of PPE 1.8 Handling of tools and equipment 1.9 Reporting and documentation 1.10 Preventive maintenance

	1.11 Methods and techniques 1.12 Quality procedures 1.13 Storage procedures
2. Underpinning Skills	2.1 Using appropriate hand tool for the job 2.2 Observing safety precautions when using hand tools 2.3 Using power tools correctly and safely in accordance to manufacturer's operating specification. 2.4 Checking condition of tools after use 2.5 Applying appropriate lubricant on hand tools and power tools after use and prior to storage 2.6 Inspecting and correcting or replacing defective tools, instruments, power tools and accessories 2.7 Storing Tools and power tools safely in appropriate location
3. Underpinning Attitudes	3.1 Commitment to occupational health and safety practices 3.2 Environmental concerns 3.3 Eagerness to learn 3.4 Tidiness and timeliness 3.5 Concern to proper use of tools 3.6 Orderliness
4. Resource Implications	4.1 Workplace (simulated or actual) 4.2 Different types of construction hand tools and power tools 4.3 Pens 4.4 Papers 4.5 Work books 4.6 Tools and power tools operating and maintenance manuals

Assessment Evidence Guide

1. Critical Aspects of Competency	Assessment required evidence that the candidate: 1.1 Used appropriate hand tool for the job. 1.2 Observe safety precautions when using hand tools. 1.3 Used power tools safely in accordance to manufacturer's operating specification. 1.4 Cleaned and maintained hand tools and power tools after use and prior to storage. 1.5 Inspected and corrected or replaced defective tools, instruments, power tools and accessories. 1.6 Stored tools and power tools safely in appropriate location.
2. Methods of Assessment	Competency should be assessed by: 2.1 Written examination 2.2 Demonstration 2.3 Oral questioning 2.4 Workplace observation 2.5 Portfolio

3. Context of Assessment	3.1 Competency assessment must be done in a training center or in an actual or simulated work place after completion of the training module.

Unit of Competency: **CARRY OUT MEASUREMENTS AND CALCULATIONS**	**Nominal Duration:** 14 hrs.	**Unit Code:** SEIP-CON-ALU-3-S
Unit Descriptor: This unit covers the knowledge, skills and attitudes required to carry-out measurements and calculations. It specifically includes the tasks of checking usability of measuring devices, carrying out accurate construction work measurements, executing simple construction work calculations and cleaning and maintaining measuring instruments.		

Elements and Performance Criteria Template:

(Terms in the performance criteria that are written in **bold and underlined** are described in the range of variables).

Elements of Competency	Performance Criteria
1. Check usability of measuring devices	1.1 Appropriate **measuring device** is selected for the job. 1.2 Applications of measuring device is determined. 1.3 Usability of measuring device is checked and verified. 1.4 Measuring device is prepared.
2. Carry out accurate construction work measurements	2.1 Working drawings are analyzed. 2.2 Measurements are obtained using appropriate measuring device. 2.3 **Systems of measurements** are identified and converted where necessary. 2.4 Measurement results are confirmed and recorded. 2.5 Materials requirements are estimated. 2.6 Tools and equipment are identified. 2.7 Manpower requirements and skills are identified.
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.

Range of Variables

Variable	Range (Includes but not limited to):
1. Measuring device	1.1 Set squares

	1.2 Tri-square 1.3 Dial indicators 1.4 Micrometers 1.5 Slide calipers 1.6 Steel tape (measure tape) 1.7 Steel rule 1.8 Feeler gauges 1.9 Steel Protractor 1.10 Universal Bevel Protractor
2. Systems of measurements	2.1 ISO standard 2.2 English system 2.3 Metric system
3. Four basic mathematical operations	3.1 Addition 3.2 Subtraction 3.3 Multiplication 3.4 Division

Curricular Content Guide

1. Underpinning Knowledge	1.1 Techniques of analyzing working drawings 1.2 Types and principles of operation of measuring devices 1.3 The ISO standard of measurements 1.4 Methods of measurement and calculation 1.5 Fraction and decimals 1.6 Linear measurement 1.7 Units of conversion and conversion factors in measurements 1.8 Dimensioning and fits and tolerances 1.9 Calculating ratio and proportion 1.10 Care in the use of measuring devices 1.11 Procedure of estimating materials requirements 1.12 Tools and equipment identification methods 1.13 Method of identifying manpower requirements and skills
2. Underpinning Skills	2.1 Analyzing working drawings 2.2 Selecting appropriate measuring device for the job 2.3 Checking and verifying usability of measuring device 2.4 Obtaining measurements using appropriate measuring device. 2.5 Confirming measurements and recording results 2.6 Carrying out simple calculations involving four basic mathematical operations 2.7 Calculating material quantities 2.8 Identifying tools and equipment 2.9 Identifying manpower requirements and skills 2.10 Interpreting and communicating results to authority 2.11 Cleaning and storing measuring instruments
3. Underpinning Attitudes	3.1 Cleanliness/tidiness 3.2 Commitment to occupational health and safety practices

	3.3 Environmental concerns 3.4 Eagerness to learn 3.5 Timeliness and orderliness 3.6 Respect for rights of peers and seniors in workplace 3.7 Orderliness
4. Resource Implications	4.1 Workplace (simulated or actual) 4.2 Different types of measuring and checking tools/instruments 4.3 Pens 4.4 Papers 4.5 Work books 4.6 Measuring tools operating and maintenance manual

Assessment Evidence Guide

1. Critical Aspects of Competency	Assessment required evidence that the candidate: 1.1 Selected appropriate measuring device for the job 1.2 Checked and verified usability of measuring device 1.3 Obtained measurements using appropriate measuring device 1.4 Confirmed measurements and recorded results 1.5 Carried out simple calculations involving four basic mathematical operations 1.6 Calculated material quantities 1.7 Interpreted and communicated results to authority
2. Methods of Assessment	Competency should be assessed by: 2.1 Written examination 2.2 Demonstration 2.3 Oral questioning 2.4 Workplace observation 2.5 Portfolio
3. Context of Assessment	3.1 Competency assessment must be done in a training center or in an actual or simulated work place after completion of the training module.

C. The Occupation Specific (Core) Competencies

Unit of Competency: **EXPLAIN FUNDAMENTALS OF ALUMINUM MATERIALS AND PROCESSES**	**Nominal Duration:** 24 hrs.	**Unit Code:** SEIP-CON-ALU-1-O
Unit Descriptor: This unit covers the knowledge, skills and attitudes required to explain fundamentals of Aluminum materials and processes**.** It specifically includes the tasks of describing the properties of Aluminum materials and identifying the fabrication processes for Aluminum profiles.		

Elements and Performance Criteria Template:
(Terms in the performance criteria that are written in **bold and underlined** are described in the range of variables).

Elements of Competency	Performance Criteria
1. Describe the properties of Aluminum materials	1.1 **Properties of Aluminum** materials are identified 1.2 **Uses of Aluminum** in the construction sector is identified 1.3 **Advantages** and **disadvantages** of Aluminum materials in construction application is explained
2. Identify the fabrication processes for Aluminum profiles	2.1 Aluminum production by extrusion method is identified 2.2 **Fabrication processes** for Aluminum profiles are identified

Range of Variables

Variable	**Range** (Includes but not limited to):
1. Properties of Aluminum	1.1 Weight 1.2 Strength 1.3 Linear expansion 1.4 Machining 1.5 Formability 1.6 Conductivity 1.7 Joining 1.8 Corrosion resistance 1.9 Non-magnetic material 1.10 Zero toxicity
2. Uses of Aluminum	2.1 Frame of glass walls 2.2 Frame for windows 2.3 Frame for false ceiling 2.4 Frame for cabinets 2.5 Cast door handles 2.6 Window catches 2.7 Staircase 2.8 Heating and air conditioning systems
3. Advantages	3.1 Quick to set up 3.2 Very precise

	3.3 Sturdy and durable 3.4 Can be re-used 3.5 Decorative
4. Disadvantages	4.1 Expensive compared to steel 4.2 Not field modifiable 4.3 Low melting point makes it hard to weld (Needs special welding methods) 4.4 Risk of theft door scraps
5. Fabrication processes	5.1 Cutting 5.2 Deburring 5.3 Punching/forming 5.4 Jointing 5.5 Revitting 5.6 Screwing 5.7 Sealing

Curricular Content Guide

1. Underpinning Knowledge	1.1 Properties of Aluminum materials 1.2 Uses of Aluminum in the construction sector 1.3 Advantages and disadvantages of Aluminum materials in construction application. 1.4 Aluminum extrusion method and processes 1.5 Fabrication processes for Aluminum profiles
2. Underpinning Skills	2.1 Identifying the properties of Aluminum materials 2.2 Identified the uses of Aluminum in the construction industry 2.3 Advantages and disadvantages of Aluminum materials in construction application. 2.4 Aluminum extrusion method and processes 2.5 Fabrication processes for Aluminum profiles
3. Underpinning Attitudes	3.1 Commitment to occupational health and safety practices 3.2 Concern to environmental care 3.3 Eagerness to learn 3.4 Tidiness, timeliness, and orderliness 3.5 Respect for rights of peers and seniors in workplace 3.6 Communication with peers and seniors in workplace
4. Resource Implications	4.1 Workplace (simulated or actual) 4.2 Different types and profiles of Aluminum 4.3 Complete set of tools, equipment and PPEs 4.4 Work instruction sheets/manuals 4.5 Pens 4.6 Papers

Assessment Evidence Guide

1. Critical Aspects of Competency	Assessment required evidence that the candidate: 1.1 Described the properties of Aluminum materials 1.2 Explained the Advantages and disadvantages of Aluminum materials used in construction application 1.3 Identified the fabrication processes for Aluminum profiles
2. Methods of Assessment	Competency should be assessed by: 2.1 Written examination 2.2 Demonstration 2.3 Oral questioning 2.4 Workplace observation 2.5 Portfolio
3. Context of Assessment	3.1 Competency assessment must be done in a training center or in an actual or simulated work place after completion of the training module.

Unit of Competency: **CUT ALUMINUM MATERIALS/PROFILES**	**Nominal Duration:** 40 hrs.	**Unit Code:** SEIP-CON-ALU-2-O
Unit Descriptor: This unit covers the knowledge, skills and attitudes required to cut Aluminum materials/profiles**.** It specifically includes the tasks of preparing machines and work area for safe operation, performing cutting of Aluminum materials , finishing cut ends of Aluminum materials and cleaning and maintaining tools. Equipment and work area.		

Elements and Performance Criteria Template:

(Terms in the performance criteria that are written in **bold and underlined** are described in the range of variables).

Elements of Competency	Performance Criteria
1. Prepare machines and work area for safe operation	1.1 **Machines** used for Aluminum 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 Aluminum materials	2.1 Recommended Aluminum cutting equipment and tools are used to cut Aluminum profiles safely 2.2 **Hazards** associated when performing Aluminum cutting and grinding work is identified 2.3 Personal protective equipment are used when cutting Aluminum materials 2.4 Cutting of Aluminum materials is performed in accordance with workplace requirements.
3. Finish cut ends of Aluminum materials	3.1 **Appropriate processes** are carried out on an Aluminum end after cutting. 3.2 Cut ends of Aluminum 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.

Range of Variables

Variable	**Range** (Includes but not limited to):
1. Machines	1.1 Pneumatic circular saw 1.2 Band saw 1.3 Aluminum profile cutting machine 1.4 Mitering jig 1.5 Deburring machine 1.6 Workbenches 1.7 Drill press

	1.8 Bending machine
2. Tools and personal protective equipment (PPE)	2.1 Tools 2.1.1 Jig saw 2.1.2 Rivet gun 2.1.3 Drill 2.1.4 Portable grinder 2.1.5 Hacksaw 2.1.6 Poer screwdriver 2.1.7 Tin snip 2.1.8 Wrenches 2.1.9 Steel rule 2.1.10 Tri-square 2.1.11 Sealant gun 2.2 PPE 2.2.1 Safety eye glass 2.2.2 Face shield 2.2.3 Respirator 2.2.4 Face mask 2.2.5 Hand gloves 2.2.6 Apron (vest) 2.2.7 Safety shoes 2.2.8 Hard hat (helmet)
3. Hazards	3.1 Skin burns due to hot Aluminum ends after cutting or grinding 3.2 Aluminum dust is combustible 3.3 Inhalation of Aluminum dust 3.4 Cuts due to sharp edges after cutting
6. Appropriate processes	6.1 Deburring 6.2 Filing 6.3 Chamfering 6.4 Mitering

Curricular Content Guide

1. Underpinning Knowledge	1.1 Types and makes of machines used for Aluminum fabrication works 1.2 Procedure for gathering and checking of tools and personal protective equipment (PPE) 1.3 Recommended Aluminum cutting equipment and tools 1.4 Hazards associated when performing Aluminum cutting and grinding work 1.5 Personal protective equipment used when cutting Aluminum materials 1.6 Methods and techniques of cutting of Aluminum materials 1.7 Processes made on Aluminum tube end after cutting. 1.8 Cleaning and checking procedures for tools and equipment 1.9 Cleaning procedure of work of area

	1.10 Storing of tools, equipment and PPEs in accordance with workplace policy.
2. Underpinning Skills	2.1 Preparing and checking machines used for Aluminum fabrication works 2.2 Gathering and checking Tools and personal protective equipment (PPE) for usability 2.3 Preparing work area for safe cutting operation 2.4 Using recommended Aluminum cutting equipment and tools to cut Aluminum profiles safely 2.5 Identifying hazards associated when performing Aluminum cutting and grinding work. 2.6 Using personal protective equipment when cutting Aluminum materials 2.7 Performing cutting of Aluminum materials in accordance with workplace requirements. 2.8 Carrying out appropriate processes on Aluminum end after cutting. 2.9 Finishing cut ends of Aluminum materials in accordance with workplace/work plan specification 2.10 Cleaning and checking PPE, tools and equipment for usability 2.11 Cleaning work area in accordance with workplace requirements 2.12 storing tools, equipment and PPEs in accordance with workplace policy.
3. Underpinning Attitudes	3.1 Commitment to occupational health and safety practices 3.2 Concern to environmental care 3.3 Eagerness to learn 3.4 Tidiness, timeliness, and orderliness 3.5 Respect for rights of peers and seniors in workplace 3.6 Communication with peers and seniors in workplace
4. Resource Implications	4.1 Workplace (simulated or actual) 4.2 Different types and profiles of Aluminum 4.3 Complete set of tools, equipment and PPEs 4.4 Work instruction sheets/manuals 4.5 Pens 4.6 Papers

Assessment Evidence Guide

1. Critical Aspects of Competency	Assessment required evidence that the candidate: 1.1 Prepared machines and work area for safe operation in accordance with workplace requirement. 1.2 Performed cutting of Aluminum materials following plans and specifications. 1.3 Finished cut ends of Aluminum materials iin accordance with workplace/work plan specifications.

	1.4 Cleaned and maintained tools. equipment and work area in accordance with workplace requirements.
2. Methods of Assessment	Competency should be assessed by: 2.1 Written examination 2.2 Demonstration 2.3 Oral questioning 2.4 Workplace observation 2.5 Portfolio
3. Context of Assessment	3.1 Competency assessment must be done in a training center or in an actual or simulated work place after completion of the training module.

Unit of Competency: FABRICATE AND INSTALL ALUMINUM WINDOWS AND GLASS	Nominal Duration: 56hrs.	Unit Code: SEIP-CON-ALU-3-O
Unit Descriptor: This unit covers the knowledge, skills and attitudes required to fabricate and install Aluminum windows with glass. It specifically includes the tasks of identifying work requirements, preparing for work, fabricating Aluminum structure for windows, installing Aluminum windows and glass and cleaning and maintaining tools, equipment and work area.		

Elements and Performance Criteria Template:

(Terms in the performance criteria that are written in **bold and underlined** are described in the range of variables).

Elements of Competency	Performance Criteria
1. Identify work requirements	1.1 Dimensions of Aluminum windows are identified in accordance with workplace plan/drawing and specifications. 1.2 **Types/classification of Aluminum profile** is identified in accordance with workplace plan/drawing and specifications. 1.3 **Shape of Aluminum 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 Aluminum structure for windows	3.1 Aluminum profile/materials are measured in accordance with work plan/drawing specifications 3.2 Aluminum 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 Aluminum structure for windows is performed in accordance with plans/drawings.
4. Install Aluminum windows and glass.	4.1 Aluminum window frame/structure is installed on location in accordance with workplace requirement. 4.2 Aluminum window frame/structure is fixed on location in accordance with workplace requirements. 4.3 **Type of glass** and sizeto 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 Aluminum 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.

Range of Variables

Variable	**Range** (Includes but not limited to):
1. Types/class of Aluminum profile	In terms of finish: 1.1 Anodized 1.2 Brite clear 1.3 Brite black 1.4 Brass 1.5 Bronze 1.6 Mill 1.7 Satin black 1.8 Stainless Steel Brushed 1.9 Painted finish 1.10 Pure protective/bonded finish
2. Shape of Aluminum profile	2.1 J-cap 2.2 Divider 2.3 Corner moulding 2.4 Z-clip 2.5 Botom track-sliding 2.6 Top track 2.7 Gasket 2.8 Shoe 2.9 Wheels 2.10 channel cap 2.11 Corner bead 2.12 Counter edge 2.13 T-edge 2.14 Finger pull 2.15 Slot wall 2.16 Header
3. Method of assembly	3.1 Riveting 3.2 Mechanical interlocking 3.3 Metal screwing 3.4 Using bolts and nuts 3.5 Welding 3.6 Soldering 3.7 Brazing
4. Type of glass	4.1 Basic type of glass 4.1.1 Float glass 4.1.2 Sheet glass 4.1.3 Patterned glass 4.1.4 Wired glass

	4.2 Hybrid type of glass 4.2.1 Reflective 4.2.2 Insulated 4.2.3 Safety 4.2.4 Laminated 4.2.5 Toughened 4.2.6 Tinted

Curricular Content Guide

1. Underpinning Knowledge	1.1 Dimensions of Aluminum windows 1.2 Types/classification of Aluminum profile 1.3 Shape of Aluminum profile for window and glass works 1.4 Methods and techniques of identifying work requirements in accordance with workplace plan/drawing and specifications 1.5 Procedure of gathering and checking tools and equipment for usability and working conditions. 1.6 Procedure of gathering and checking materials for quality and compliance to workplace specifications 1.7 Methods and techniques of measuring Aluminum profile/materials in accordance with work plan/drawing specifications 1.8 Procedure of cutting Aluminum profile/materials in accordance with work plan/drawing specifications 1.9 Method of assembly of structure for windows 1.10 Assembly procedure of Aluminum structure for windows 1.11 Installation procedure of Aluminum window frame/structure on location 1.12 Method and techniques of fixing Aluminum window frame/structure on location 1.13 Type of glass and sizes 1.14 Cutting techniques of glasses 1.15 Installation procedure of glasses into the Aluminum window frame/structure
1. Underpinning Skills	1.1 Identifying dimensions of Aluminum windows in accordance with workplace plan/drawing and specifications. 1.2 Identifying types/classification of Aluminum profile in accordance with workplace plan/drawing and specifications. 1.3 Determining shape of Aluminum profile for window and glass works 1.4 Identifying work requirements in accordance with workplace plan/drawing and specifications 1.5 Gathering and checking tools and equipment for usability and working conditions. 1.6 Gathering and checking materials for quality and compliance to workplace specifications

	1.7 measuring Aluminum profile/materials in accordance with work plan/drawing specifications 1.8 cutting Aluminum profile/materials in accordance with work plan/drawing specifications 1.9 identifying Method of assembly of structure for windows in accordance with workplace plan/drawing specifications. 1.10 performing Assembly of Aluminum structure for windows in accordance with plans/drawings. 1.11 Installing Aluminum window frame/structure on location in accordance with workplace requirement. 1.12 Fixing Aluminum window frame/structure on location in accordance with workplace requirements. 1.13 Identifying the type of glass and size to be installed in accordance with work plan/drawing specification. 1.14 Cutting glasses to specified dimension in accordance with work plan/drawing specification 1.15 Installing glasses into the Aluminum window frame/structure safely and in accordance with workplace requirements.
1. Underpinning Attitudes	1.1 Commitment to occupational health and safety practices 1.2 Concern to environmental care 1.3 Eagerness to learn 1.4 Tidiness, timeliness, and orderliness 1.5 Respect for rights of peers and seniors in workplace 1.6 Communication with peers and seniors in workplace
2. Resource Implications	2.1 Workplace (simulated or actual) 2.2 Different types and profiles of Aluminum 2.3 complete set of tools, equipment and PPEs 2.4 Work instruction sheets/manuals 2.5 Pens 2.6 Papers

Assessment Evidence Guide

1. Critical Aspects of Competency	Assessment required evidence that the candidate: 1.1 Identified work requirements for Aluminum window and glass fabrication and installation in accordance with workplace specifications 1.2 Prepared for work in accordance with workplace requirements 1.3 Fabricated Aluminum structure for windows in accordance with work plan/drawing specifications 1.4 Installed Aluminum windows and glass following workplace requirements 1.5 Cleaned and maintained tools, equipment and work area in accordance with workplace policy.
2. Methods of Assessment	Competency should be assessed by: 2.1 Written examination 2.2 Demonstration

	2.3 Oral questioning 2.4 Workplace observation 2.5 Portfolio
3. Context of Assessment	3.1 Competency assessment must be done in a training center or in an actual or simulated work place after completion of the training module.

Unit of Competency: **FABRICATE AND INSTALL ALUMINUM DOORS AND GLASS**	**Nominal Duration:** 56 hrs.	**Unit Code:** SEIP-CON-ALU-4-O
Unit Descriptor: This unit covers the knowledge, skills and attitudes required to fabricate and install Aluminum doors with glass. It specifically includes the tasks of identifying work requirements, preparing for work, fabricating Aluminum structure for doors, installing Aluminum doors and glass and cleaning and maintaining tools, equipment and work area.		

Elements and Performance Criteria Template:
(Terms in the performance criteria that are written in **bold and underlined** are described in the range of variables).

Elements of Competency	Performance Criteria
1. Identify work requirements	1.1 Dimensions of Aluminum doors are identified in accordance with workplace plan/drawing and specifications. 1.2 **Types/classification of Aluminum profile** for door is identified in accordance with workplace plan/drawing and specifications. 1.3 **Shape of Aluminum 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 and compliance to workplace specifications
3. Fabricate Aluminum structure for doors	3.1 Aluminum profile/materials are measured in accordance with work plan/drawing specifications 3.2 Aluminum 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 Aluminum structure for doors is performed in accordance with plans/drawings.
4. Install Aluminum door and glass.	4.1 Aluminum door frame/structure is installed on location in accordance with workplace requirement. 4.2 Aluminum 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 Aluminum 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.

Range of Variables

Variable	**Range** (Includes but not limited to):
1. Types/class of Aluminum profile	In terms of finish: 1.1 Anodized 1.2 Brite clear 1.3 Brite black 1.4 Brass 1.5 Bronze 1.6 Mill 1.7 Satin black 1.8 Stainless Steel Brushed 1.9 Painted finish 1.10 Pure protective/bonded finish
2. Shape of Aluminum profile	2.1 J-cap 2.2 Divider 2.3 Corner moulding 2.4 Z-clip 2.5 Botom track-sliding 2.6 Top track 2.7 Gasket 2.8 Shoe 2.9 Wheels 2.10 channel cap 2.11 Corner bead 2.12 Counter edge 2.13 T-edge 2.14 Finger pull 2.15 Slot wall 2.16 Header
3. Method of assembly	3.1 Riveting 3.2 Mechanical interlocking 3.3 Metal screwing 3.4 Using bolts and nuts 3.5 Welding 3.6 Soldering 3.7 Brazing
4. Type of glass	4.1 Basic type of glass 4.1.1 Float glass 4.1.2 Sheet glass 4.1.3 Patterned glass 4.1.4 Wired glass 4.2 Hybrid type of glass

	4.2.1 Reflective 4.2.2 Insulated 4.2.3 Safety 4.2.4 Laminated 4.2.5 Toughened 4.2.6 Tinted

Curricular Content Guide

1. Underpinning Knowledge	1.1 Dimensions of Aluminum doors 1.2 Types/classification of Aluminum profile 1.3 Shape of Aluminum profile for door and glass works 1.4 Methods and techniques of identifying work requirements in accordance with workplace plan/drawing and specifications 1.5 Procedure of gathering and checking tools and equipment for usability and working conditions. 1.6 Procedure of gathering and checking materials for quality and compliance to workplace specifications 1.7 Methods and techniques of measuring Aluminum profile/materials in accordance with work plan/drawing specifications 1.8 Procedure of cutting Aluminum profile/materials in accordance with work plan/drawing specifications 1.9 Method of assembly of structure for doors 1.10 Assembly procedure of Aluminum structure for doors 1.11 Installation procedure of Aluminum door frame/structure on location 1.12 Method and techniques of fixing Aluminum door frame/structure on location 1.13 Type of glass and sizes 1.14 Cutting techniques of glasses 1.15 Installation procedure of glasses into the Aluminum door frame/structure
2. Underpinning Skills	2.1 Identifying dimensions of Aluminum doors in accordance with workplace plan/drawing and specifications. 2.2 Identifying types/classification of Aluminum profile in accordance with workplace plan/drawing and specifications. 2.3 Determining shape of Aluminum profile for door and glass works 2.4 Identifying work requirements in accordance with workplace plan/drawing and specifications 2.5 Gathering and checking tools and equipment for usability and working conditions. 2.6 Gathering and checking materials for quality and compliance to workplace specifications 2.7 Measuring Aluminum profile/materials in accordance with work plan/drawing specifications

	2.8 Cutting Aluminum profile/materials in accordance with work plan/drawing specifications 2.9 Identifying method of assembly of structure for doors in accordance with workplace plan/drawing specifications. 2.10 Performing assembly of Aluminum structure for doors in accordance with plans/drawings. 2.11 Installing Aluminum window frame/structure on location in accordance with workplace requirement. 2.12 Fixing Aluminum window frame/structure on location in accordance with workplace requirements. 2.13 Identifying the type of glass and size to be installed in accordance with work plan/drawing specification. 2.14 Cutting glasses to specified dimension in accordance with work plan/drawing specification 2.15 Installing glasses into the Aluminum door frame/structure safely and in accordance with workplace requirements.
3. Underpinning Attitudes	3.1 Commitment to occupational health and safety practices 3.2 Concern to environmental care 3.3 Eagerness to learn 3.4 Tidiness, timeliness, and orderliness 3.5 Respect for rights of peers and seniors in workplace 3.6 Communication with peers and seniors in workplace
4. Resource Implications	4.1 Workplace (simulated or actual) 4.2 Different types and profiles of Aluminum 4.3 complete set of tools, equipment and PPEs 4.4 Work instruction sheets/manuals 4.5 Pens 4.6 Papers

Assessment Evidence Guide

1. Critical Aspects of Competency	Assessment required evidence that the candidate: 1.1 Identified work requirements for Aluminum doors and glass fabrication and installation in accordance with workplace specifications 1.2 Prepared for work in accordance with workplace requirements 1.3 Fabricated Aluminum structure for doors in accordance with work plan/drawing specifications 1.4 Installed Aluminum doors and glass following workplace requirements 1.5 Cleaned and maintained tools, equipment and work area in accordance with workplace policy.
2. Methods of Assessment	Competency should be assessed by: 2.1 Written examination 2.2 Demonstration 2.3 Oral questioning 2.4 Workplace observation

	2.5 Portfolio
3. Context of Assessment	3.1 Competency assessment must be done in a training center or in an actual or simulated work place after completion of the training module.

Unit of Competency: **FABRICATE AND INSTALL ALUMINUM PARTITION AND GLASS**	**Nominal Duration:** 56 hrs.	**Unit Code:** SEIP-CON-ALU-5-O
Unit Descriptor: This unit covers the knowledge, skills and attitudes required to fabricate and install Aluminum partition with glass. It specifically includes the tasks of identifying work requirements, preparing for work, fabricating Aluminum structure for partition/wall, installing Aluminum partition/wall and glass and cleaning and maintaining tools, equipment and work area.		

Elements and Performance Criteria Template:

(Terms in the performance criteria that are written in **bold and underlined** are described in the range of variables).

Elements of Competency	Performance Criteria
1. Identify work requirements	1.1 Dimensions of Aluminum partition/wall are identified in accordance with workplace plan/drawing and specifications. 1.2 **Types/classification of Aluminum profile** for partition/wall is identified in accordance with workplace plan/drawing and specifications. 1.3 **Shape of Aluminum 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 Aluminum structure for glass partition/wall	3.1 Aluminum profile/materials are measured in accordance with work plan/drawing specifications 3.2 Aluminum profile/materials are cut in accordance with work plan/drawing specifications 3.3 **Method of assembly** of Aluminum structure for partition/wall are identified in accordance with workplace plan/drawing specifications. 3.4 Assembly of Aluminum structure for partition/wall is performed in accordance with plans/drawings.
4. Install Aluminum partition/wall and glass.	4.1 Aluminum partition/wall frame/structure is installed on location in accordance with workplace requirement. 4.2 Aluminum 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 Aluminum partition/wall 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.

Range of Variables

Variable	**Range** (Includes but not limited to):
1. Types/class of Aluminum profile	In terms of finish: 1.1 Anodized 1.2 Brite clear 1.3 Brite black 1.4 Brass 1.5 Bronze 1.6 Mill 1.7 Satin black 1.8 Stainless Steel Brushed 1.9 Painted finish 1.10 Pure protective/bonded finish
2. Shape of Aluminum profile	2.1 J-cap 2.2 Divider 2.3 Corner moulding 2.4 Z-clip 2.5 Botom track-sliding 2.6 Top track 2.7 Gasket 2.8 Shoe 2.9 Wheels 2.10 channel cap 2.11 Corner bead 2.12 Counter edge 2.13 T-edge 2.14 Finger pull 2.15 Slot wall 2.16 Header
3. Method of assembly	3.1 Riveting 3.2 Mechanical interlocking 3.3 Metal screwing 3.4 Using bolts and nuts 3.5 Welding 3.6 Soldering 3.7 Brazing
4. Type of glass	4.1 Basic type of glass 4.1.1 Float glass 4.1.2 Sheet glass

	4.1.3 Patterned glass 4.1.4 Wired glass 4.2 Hybrid type of glass 4.2.1 Reflective 4.2.2 Insulated 4.2.3 Safety 4.2.4 Laminated 4.2.5 Toughened 4.2.6 Tinted

Curricular Content Guide

1. Underpinning Knowledge	1.1 Dimensions of Aluminum partition/wall 1.2 Types/classification of Aluminum profile 1.3 Shape of Aluminum profile for partition/wall and glass works 1.4 Methods and techniques of identifying work requirements in accordance with workplace plan/drawing and specifications 1.5 Procedure of gathering and checking tools and equipment for usability and working conditions. 1.6 Procedure of gathering and checking materials for quality and compliance to workplace specifications 1.7 Methods and techniques of measuring Aluminum profile/materials in accordance with work plan/drawing specifications 1.8 Procedure of cutting Aluminum profile/materials in accordance with work plan/drawing specifications 1.9 Method of assembly of structure for partition/wall 1.10 Assembly procedure of Aluminum structure for partition/wall 1.11 Installation procedure of Aluminum partition/wall frame/structure on location 1.12 Method and techniques of fixing Aluminum partition/wall frame/structure on location 1.13 Type of glass and sizes 1.14 Cutting techniques of glasses 1.15 Installation procedure of glasses into the Aluminum partition/wall frame/structure
2. Underpinning Skills	2.1 Identifying dimensions of Aluminum partition/wall in accordance with workplace plan/drawing and specifications. 2.2 Identifying types/classification of Aluminum profile in accordance with workplace plan/drawing and specifications. 2.3 Determining shape of Aluminum profile for partition/wall and glass works 2.4 Identifying work requirements in accordance with workplace plan/drawing and specifications 2.5 Gathering and checking tools and equipment for usability and working conditions.

	2.6 Gathering and checking materials for quality and compliance to workplace specifications 2.7 Measuring Aluminum profile/materials in accordance with work plan/drawing specifications 2.8 Cutting Aluminum profile/materials in accordance with work plan/drawing specifications 2.9 Identifying method of assembly of structure for partition/wall in accordance with workplace plan/drawing specifications. 2.10 Performing assembly of Aluminum structure for partition/wall in accordance with plans/drawings. 2.11 Installing Aluminum partition/wall frame/structure on location in accordance with workplace requirement. 2.12 Fixing Aluminum partition/wall frame/structure on location in accordance with workplace requirements. 2.13 Identifying the type of glass and size to be installed in accordance with work plan/drawing specification. 2.14 Cutting glasses to specified dimension in accordance with work plan/drawing specification 2.15 Installing glasses into the Aluminum partition/wall frame/structure safely and in accordance with workplace requirements.
3. Underpinning Attitudes	3.1 Commitment to occupational health and safety practices 3.2 Concern to environmental care 3.3 Eagerness to learn 3.4 Tidiness, timeliness, and orderliness 3.5 Respect for rights of peers and seniors in workplace 3.6 Communication with peers and seniors in workplace
4. Resource Implications	4.1 Workplace (simulated or actual) 4.2 Different types and profiles of Aluminum 4.3 Conplete set of tools, equipment and PPEs 4.4 Work instruction sheets/manuals 4.5 Pens 4.6 Papers

Assessment Evidence Guide

1. Critical Aspects of Competency	Assessment required evidence that the candidate: 1.1 Identified work requirements for Aluminum partition/wall and glass fabrication and installation in accordance with workplace specifications 1.2 Prepared for work in accordance with workplace requirements 1.3 Fabricated Aluminum structure for partition/wall in accordance with work plan/drawing specifications 1.4 Installed Aluminum partition/wall and glass following workplace requirements 1.5 Cleaned and maintained tools, equipment and work area in accordance with workplace policy.

2. Methods of Assessment	Competency should be assessed by: 2.1 Written examination 2.2 Demonstration 2.3 Oral questioning 2.4 Workplace observation 2.5 Portfolio
3. Context of Assessment	3.1 Competency assessment must be done in a training center or in an actual or simulated work place after completion of the training module.

Unit of Competency: **FABRICATE AND INSTALL ALUMINUM FALSE CEILING**	**Nominal Duration:** 48hrs.	**Unit Code:** SEIP-CON-ALU-6-O
Unit Descriptor: This unit covers the knowledge, skills and attitudes required to fabricate and install Aluminum false ceiling. It specifically includes the tasks of identifying work requirements, preparing for work, fabricating Aluminum structure for false ceiling, installing Aluminum false ceiling and ceiling board and cleaning and maintaining tools, equipment and work area.		

Elements and Performance Criteria Template:

(Terms in the performance criteria that are written in **bold and underlined** are described in the range of variables).

Elements of Competency	Performance Criteria
1. Identify work requirements	1.1 Dimensions of Aluminum false ceiling are identified in accordance with workplace plan/drawing and specifications. 1.2 **Types/classification of Aluminum profile** for false ceiling is identified in accordance with workplace plan/drawing and specifications. 1.3 **Shape of Aluminum 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 Aluminum structure for false ceiling	3.1 Aluminum profile/materials are measured in accordance with work plan/drawing specifications 3.2 Aluminum profile/materials are cut in accordance with work plan/drawing specifications 3.3 **Method of assembly** of Aluminum structure for false ceiling are identified in accordance with workplace plan/drawing specifications. 3.4 Assembly of Aluminum structure for false ceiling is performed in accordance with plans/drawings.
4. Install Aluminum structure for false ceiling and board.	4.1 Aluminum frame/structure of false ceiling is installed on location in accordance with workplace requirement. 4.2 Aluminum 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 Aluminum false ceiling frame/structure in accordance with workplace requirements.
5. Clean and maintain tools,	5.1 PPE, tools and equipment are cleaned and checked for

equipment and work area	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.

Range of Variables

Variable	**Range** (Includes but not limited to):
1. Types/class of Aluminum profile	1.1 Anodized 1.2 Brite clear 1.3 Brite black 1.4 Brass 1.5 Bronze 1.6 Mill 1.7 Satin black 1.8 Stainless Steel Brushed 1.9 Painted finish 1.10 Pure protective/bonded finish
2. Shape of Aluminum profile	2.1 J-cap 2.2 Divider 2.3 Corner moulding 2.4 Z-clip 2.5 Botom track-sliding 2.6 Top track 2.7 Gasket 2.8 Shoe 2.9 Wheels 2.10 channel cap 2.11 Corner bead 2.12 Counter edge 2.13 T-edge 2.14 Finger pull 2.15 Slot wall 2.16 Header
3. Method of assembly	3.1 Riveting 3.2 Mechanical interlocking 3.3 Metal screwing 3.4 Using bolts and nuts 3.5 Welding 3.6 Soldering 3.7 Brazing
4. Type of ceiling board	4.1 Gypsoom board 4.2 Mineral fiber 4.3 Laminated PVC 4.4 Calcium silicate 4.5 Fireproof mineral fiber

	4.6 Fiberglass 4.7 Plywood 4.8 Plyboard

Curricular Content Guide

1. Underpinning Knowledge	1.1 Dimensions of false ceiling 1.2 Types/classification of Aluminum false ceiling profile 1.3 Shape of Aluminum profile for false ceiling and board works 1.4 Methods and techniques of identifying work requirements in accordance with workplace plan/drawing and specifications 1.5 Procedure of gathering and checking tools and equipment for usability and working conditions. 1.6 Procedure of gathering and checking materials for quality and compliance to workplace specifications 1.7 Methods and techniques of measuring Aluminum profile/materials in accordance with work plan/drawing specifications 1.8 Procedure of cutting Aluminum profile/materials in accordance with work plan/drawing specifications 1.9 Assembly procedure of Aluminum structure for false ceiling 1.10 Installation procedure of false ceiling frame/structure on location 1.11 Method and techniques of fixing Aluminum false ceiling frame/structure on location 1.12 Type of ceiling boards and sizes 1.13 Installation procedure of ceiling boards/tiles into the Aluminum false ceiling structure
2. Underpinning Skills	2.1 Identifying dimensions of Aluminum false ceiling in accordance with workplace plan/drawing and specifications. 2.2 Identifying types/classification of Aluminum false ceiling in accordance with workplace plan/drawing and specifications. 2.3 Determining shape of Aluminum profile for false ceiling and board/tile works 2.4 Identifying work requirements in accordance with workplace plan/drawing and specifications 2.5 Gathering and checking tools and equipment for usability and working conditions. 2.6 Gathering and checking materials for quality and compliance to workplace specifications 2.7 Measuring Aluminum profile/materials in accordance with work plan/drawing specifications 2.8 Cutting Aluminum profile/materials in accordance with work plan/drawing specifications 2.9 Identifying method of assembly of structure for false ceiling in accordance with workplace plan/drawing specifications.

	2.10 Performing assembly of Aluminum structure for false ceiling in accordance with plans/drawings. 2.11 Installing Aluminum false ceiling frame/structure on location in accordance with workplace requirement. 2.12 Fixing Aluminum false ceiling frame/structure on location in accordance with workplace requirements. 2.13 Identifying the type of ceiling board/tile and size to be installed in accordance with work plan/drawing specification. 2.14 Cutting ceiling board/tile to specified dimension in accordance with work plan/drawing specification 2.15 Installing ceiling board/tiles into the Aluminum false ceiling frame/structure in accordance with workplace requirements.
3. Underpinning Attitudes	3.1 Commitment to occupational health and safety practices 3.2 Concern to environmental care 3.3 Eagerness to learn 3.4 Tidiness, timeliness, and orderliness 3.5 Respect for rights of peers and seniors in workplace 3.6 Communication with peers and seniors in workplace
4. Resource Implications	4.1 Workplace (simulated or actual) 4.2 Different types and profiles of Aluminum 4.3 complete set of tools, equipment and PPEs 4.4 Work instruction sheets/manuals 4.5 Pens 4.6 Papers

Assessment Evidence Guide

1. Critical Aspects of Competency	Assessment required evidence that the candidate: 1.1 Identified work requirements for Aluminum false ceiling fabrication and installation in accordance with workplace specifications 1.2 Prepared for work in accordance with workplace requirements 1.3 Fabricated Aluminum structure for false ceiling in accordance with work plan/drawing specifications 1.4 Installed false ceiling following workplace requirements 1.5 Installed false ceiling board/tiles in accordance with workplace specification 1.6 Cleaned and maintained tools, equipment and work area in accordance with workplace policy.
2. Methods of Assessment	Competency should be assessed by: 2.1 Written examination 2.2 Demonstration 2.3 Oral questioning 2.4 Workplace observation 2.5 Portfolio

3. Context of Assessment	3.1 Competency assessment must be done in a training center or in an actual or simulated work place after completion of the training module.

End of Competency Standard

Assessment Guide

A Framework for Effective Assessment

Aluminum Fabrication and Installation

How to Use this Assessment Guide

- This Assessment Guide presents need-to-know information for Assessors and others who want to know more about the assessment process. A handy Table of Contents Guide on the next page shows you where to look.

- If you want the basics of assessment, its key terms and definitions, in a Question & Answer (Q&A) format, see Section One.

- If you want a knowledge of who does what, the key roles and responsibilities involved in assessment, see Section Two.

- If you want a “toolbox” of tools and templates, that you can select from depending on your assessment need, see Section Three.

- If you want to look at working samples of completed assessment tools, see the Appendices.

Table of Contents

Section One: Q&A linked to Key Terms & Definitions

1.25 Define the term “evidence gathering tools” giving examples
1.26 Define the term “portfolio.”
1.27 Outline a 6-step method for preparing an evidence plan.

1.28 Outline the steps (sequence of activities) involved in developing an assessment tool.
1.29 Describe the four dimensions of competency.

Section Two: Roles and Responsibilities

Page No.

Section Three: Tools and Templates

Page No.

Assessment Guide

Section One: Objectives linked to Key Terms & Definitions

Define assessment.

Assessment is a systematic process of collecting proof or evidence on whether or not a candidate has demonstrated competence in the performance of a work-related activity/task that is directly linked to a performance standard. The assessment confirms that the individual can perform to the standard expected in the workplace and/or the nationally approved competency standard.

Give an example of assessment.

A helpful example in this regard is the driving test. The driver must prove his competence to drive by demonstrating to the driving assessor his ability to do so. The driving assessor uses a checklist to assess the candidate and make the necessary recommendations, based on the evidence he has collected in observing the candidate's driving. S/He either records/recommends that the candidate is ***competent*** or ***not yet competent.***

What is the purpose of assessment?

The Purpose of Assessment is to confirm that a trainee can perform competently to the standards expected in the workplace.

What is Assessment based on?

- An effective Assessment is based on a Competency Standard.
- A Competency Standard describes the skills, knowledge, and attitudes needed to perform effectively in the workplace, not the classroom.

Define the term "competency."

Competency is the ability to do a task successfully. Aspects of competency include:

- The capacity to perform tasks to the required standard consistently
- The ability to respond to different needs in the workplace
- The ability to plan and integrate a variety of tasks to attain a work outcome
-

Describe what makes up a competency standard.

It must be noted that a competency standard is made up of individual units of competency that include elements of competency as well as the performance criteria needed to accomplish them.

Define the term "Assessment tool."

An assessment tool is, in effect, an evidence-gathering tool. It contains both the instrument used for the assessment and instructions for gathering evidence in the assessment process. As an assessment instrument it contains the context and conditions for the assessment; tasks to be administered to the learner; an outline of the evidence to be gathered for the learner; the criteria for judging the evidence; and the necessary housekeeping records for recording and reporting requirements.

Describe the difference between Conventional Testing & Competency Based Assessment.

Conventional Testing	CBT Assessment
• Emphasis on knowledge/memorization • Teachers/Training Providers have main role • Theory & practical Tests can become outdated • High cost & central control • Relatively inflexible	• Based on competency standards • Involve industry partners in crucial role • Assessment based on demonstration of work skills rather than classroom knowledge • Flexible delivery • Competencies widely recognized • Guidelines & Templates used

Describe briefly what makes up an assessment system.

An Assessment System must be understood as a well-coordinated set of documented policies and procedures, including assessment materials and tools, that ensure assessments are consistently valid, reliable, flexible, fair, and safe.

Define the purpose of the Assessor role.

The role of Assessor is the heart and soul of effective competency based assessment. Without this pivotal role, determining the competency of the trainee is mere guesswork.

Note:

- The Industry Assessor will be asked to provide specs and practical demonstration tests from his workplace that will provide the evidence for determining competency.
- The importance of this input cannot be overemphasized for it best matches and tests the required performance criteria from the Standard.

Describe the basic questions that an Assessor must ask when planning an Assessment.

Planning an Assessment: What Needs to Happen?

- Determine which Units of Competency need to be assessed?
- Determine what Assessment Methods will be used?
- Determine what evidence-based tools (specs) need to be developed by the Assessor to guide the assessment?
- Determine how long it will take?
- Determine when the assessment will occur?
- Determine where the assessment will take place?
- Determine how it will be recorded?

Give some Assessor Requirements/Competencies.

Requirements/Competencies of an Assessor-

- The ability to use assessment tools to gather evidence effectively is essential, adjusting the language where necessary to reflect the language/literacy/numeracy levels of the workplace and not to exceed them in order to ensure learner understanding. This will also entail an ability to respond to learner needs such as responding to learner disability.

- The skill to develop specifications and practical tests, based on performance criteria, that provide evidence of competency that will fast track the assessment process.
- The ability to clearly demonstrate current industry skills and competencies relevant to the Standard.

- The Assessor is selected/appointed by Industry to act as an Assessor because of his proven competencies.
- Knows what needs to be done to assess the performance criteria
- Demonstrates a high level of expertise in the technical area to be examined
- Can provide constructive feedback

Define the challenges of the Assessor Role.

Assessor Role: Challenges

- Needs to be objective and unbiased
- Must have interpersonal skills to relax nervous candidates or deal with those who are aggressive or emotional
- Must have ability to deal with those who have literacy problems or difficult dialect

Review some basic need-to-know elements concerning assessment.

Assessment Basics: Need to Know Elements

- Assessment to be conducted by Industry Assessor selected by industry
- Industry assessor must be familiar with units of competency outlined in the course standards
- Industry Assessor should drafts specs that reflect industry requirements for trainees and that are based on critical aspects of competency
- Industry assessor is responsible for making final judgment of **competent** or **not yet competent**
- Trainer will assist industry assessor
- Trainees must demonstrate competence based on the units of competency outlined in the standards
- All resources related to units of competency must be made available prior to the assessment event, e.g., tools, equipment, materials

Describe the trainer's role in the assessment process.

The Trainer acts as a primary resource for the Assessor and acts as a Facilitator.

Trainer ensures:

- All industry required tools, equipment, and materials are available for the assessment
- The training venue is booked and has sufficient space for demonstrations/tasks
- That all logistics such as admission slips, signature sheets, and records are readily available for distribution and collection
- That all teaching materials and Standard documents and Assessment tools are ready for the Assessor

Discuss the importance of principles of assessment and what is involved.

Principles of Assessment Table

Key Principles	Relevance/Meaning
Valid	Ensures assessment aligned with the Unit of Competency and is based on evidence that shows the learner can demonstrate skills and knowledge in other similar contexts (workplace)
Reliable	Evidence presented for assessment is consistently interpreted regardless of the Assessor
Flexible	Assesses competencies held by the learner regardless of where they have been acquired; reflects the individual learner's needs
Fair	The individual learner's needs or disability is considered in the assessment process; the learner is provided with information about the assessment process and given the opportunity to challenge the result of the assessment if warranted
Safe	The assessor has inspected the venue for assessment and determined that it is safe for all involved and that emergency evacuations are in place if needed

Define the term "evidence."

Evidence is information that is gathered and matched against a Unit of Competency to provide proof of competency.

State the different forms of evidence that can be collected.

Different forms of evidence that can be collected are-

- **Direct** such as demonstration test, or observation of Candidate
- **Indirect** such as Candidate's self-assessment or third party reports such as an employer interview

Describe and outline what is involved in "rules of evidence" and why they are important.

Rules of Evidence Table

Rules of Evidence	Meaning
Valid	The assessor is given assurance that the learner possesses the skills, knowledge, and attitudes described in the Unit of Competency and related assessment requirements
Sufficient	The assessor is assured that the quality, quantity, and relevance of the evidence is sufficient to enable a judgment to be made on the learner's competency
Authentic	The assessor is assured that the evidence provided for assessment is the learner's own work
Current	The assessor is assured that the assessment evidence demonstrates current competency of the learner. This evidence must be from the present or very recent past.

Describe the purpose of evidence gathering tools.

The Purpose of evidence gathering tools are-

- To help candidates understand what is expected of them
- To provide a focus for the assessment
- To identify what is needed to verify competency

State the use of the evidence guide.

The evidence guide provides useful advice on Unit of Competency assessment and must be read in conjunction with the performance criteria, required underpinning skills/knowledge/attitudes, range statement, and the critical aspects of competency for the Standard.

State why assessment evidence is important.

Evidence is the information gathered that provides proof that the performance criteria of a unit of competency has been met. Evidence can take many forms:

- **Observation:** watching the trainee perform
- **Questioning:** asking the trainee questions
- **Demonstration of specific skills:** seeing how the trainee performs a procedure or creates a final product
- **Examining** previous work the trainee has done

Describe the kinds of Assessment Methods that can be used for Evidence gathering purposes.

Various kinds of Assessment Methods can be used for Evidence gathering purposes. A wide range of assessment methods are available for Evidence- gathering purposes. Assessment methods are not limited to those listed below. The greater the range of assessment methods applied, the better the accuracy of the assessment.

Assessment Methods Table

Methods	Examples
Direct Observation of Candidate	Actual real-time activities in the workplace Work activities in a simulated workplace/training center
Questioning	Written questions; interviews; self-evaluation with questions; verbal questioning; questionnaires

Evidence compiled by Candidate	Portfolio; collection of work samples; products with supporting documentation; logbooks; information about life experience
Methods	Examples
Review of Product	Work samples and products; products as a result of a demonstration test/spec
Third Party Feedback	Reports/testimonials from Employers and Supervisors; evidence of training; interviews with Employers and Supervisors

Advice to the Assessor: use these methods and examples as a means of making your assessment valid, reliable, flexible, fair, and safe.

Define the term "evidence gathering tools" and give some examples of these tools.

Evidence gathering tools are the actual instruments that the Assessor uses to collect evidence. Evidence may be collected through:

- Demonstration of work activity
- Observation Checklist
- Question List
- Third party reports e.g. supervisor to verify consistent performance
- Review of candidate's portfolio
- Verifying the Candidate's capacity to deal with contingencies (unexpected things that come up)
- Written test

Define the term "portfolio."

A collection of evidence that may be presented by the Candidate to an Assessor to prove the Candidate's competence at a job or task.

What are some examples of Portfolio Evidence?

- Training results and certificates
- Training workbooks
- References from employers
- Job description and work experience
- Photos and videos
- Work journals
- Awards
- Work samples
- Letters and memos

Outline a 6-step method for preparing an evidence plan.

Steps in Preparing an Evidence Plan (Sequence of Steps to Follow)-

The Evidence Plan is the most important planning tool for an Assessor. A good evidence plan generates a list of the evidence that the Assessor must gather when conducting the assessment for a specific Unit of Competency. The following 6-Point Method for preparing an Evidence Plan provides a useful sequence of inter-related steps to follow:

1. Select Unit of Competency for assessment
2. Read full Unit of Competency
3. Identify evidence requirements based on:
    a. Elements and Performance Criteria
    b. Dimensions of Competence
    c. Underpinning skills knowledge
    d. Critical aspects of competency
4. Develop a list of evidence requirements
5. Identify best ways of collecting evidence (tools)
6. Document evidence plan

Outline the steps (sequence of activities) involved in developing an assessment tool.

Following are the steps (sequence of activities) involved in developing an assessment tool:

1. Select the Unit of Competency
2. Read the Unit of Competency

3. Identify the required evidence: critical aspects of competency
4. Identify the evidence gathering method
5. Complete the evidence plan
6. Select the appropriate template
7. Complete the template
8. Check the evidence gathering tools against the evidence plan and Unit of Competency
9. Check the tool with another Assessor for his opinion

Describe the four dimensions of competency.

Task Skills: the capacity to perform tasks in the workplace and demonstrate competence that meets the required Standard;

Task Management Skills: the ability to plan and integrate several tasks simultaneously that achieve a desired work outcome such as those skills involved in budgeting for a work operation, securing supplies and equipment for the work operation, completing the task in a timely, cost-effective manner, and ensuring safety practices are followed throughout;

Contingency Management Skills: the ability to respond to crises and breakdowns in the workplace, such as accidents and emergency situations that are unanticipated and require immediate action and resolution;

Job/Role Environment Skills: the capacity to own the responsibilities and expectations of the work environment that involves working with others effectively and participating in creating a work culture where all can contribute their best within the parameters of their job role

Assessment Guidelines

Section Two: Roles and Responsibilities

The Assessment System: Planning Guide for the Assessor

An Assessment System must be understood as a well-coordinated set of documented policies and procedures, including assessment materials and tools, that ensure assessments are consistently valid, reliable, flexible, fair, and safe.

Competency Assessment is a systematic process of collecting proof or evidence on whether or not a candidate has demonstrated competence in the performance of a work-related activity/task that is directly linked to a performance standard. The assessment confirms that the individual can perform to the standard expected in the workplace and/or the nationally approved competency standard.

Each **Unit of Competency** contained in a Standard describes a distinct part of a Mason's work and job profile. Within each Unit of Competency, the following components appear:

- Unit Title
- Unit Descriptor
- Elements of Competency
- Performance Criteria
- Range of Variables
- Evidence Guide

As a prelude to conducting assessments, the Assessor must be thoroughly familiar with all of the particulars and details of the Unit of Competency that is being assessed. This is a "must" for the role of the Assessor. He must be especially familiar with the Evidence Guide for gathering critical information.

The three sample assessment tools found below focus on the critical aspects of competency that can provide the required evidence to determine competency- the evidence guide. These sample assessment tools are as follows:

- Demonstration Checklist
- Observation Checklist
- Oral Questions Checklist

The duties of the Assessor include:

- Covering all of the key elements of the Unit of Competency under assessment
- Applying rigorously the Evidence Guide for the Unit of Competency as this contains the method and context of assessment, resources required for the assessment, the critical aspects of competency, and the required underpinning knowledge, skills, and attitudes
- Developing specifications (specs) for the task sheet for Demonstration as required
- Requiring the candidate to perform project tasks that cover interrelated units of competency- known as a "clustering."
- Making what can be termed "reasonable adjustments" for candidates with disabilities or for example, those candidates with regional dialects that prove difficult to understand

Note: These "reasonable adjustments" may involve reconfiguring a simulated workplace site so that a candidate's disability does not impede the assessment process, or for example, finding someone who can understand a regional dialect and assist the Assessor with essential communication skills.

Roles and Responsibilities of Assessor

Prior to any assessment, the Assessor should follow the specific instructions below to ensure a well-planned assessment event. In most cases s/he will be assisted by a Trainer. Nevertheless, s/he should make certain that good preparation has taken place for the assessment event.

1. Visit the assessment venue or workplace to ensure an adequate work area or platform containing:

- Sufficient space for working- ensure square meters of work space enough for task to be carried out effectively and safely
- Fire extinguisher and safety equipment within reach
- Emergency procedures in place
- All necessary tools, equipment, and materials ready at hand
- All necessary machinery in good working order

2. Assessment is drawn and extracted from the relevant Unit of Competency based on an approved Standard and on an Evidence plan that clearly focuses on critical aspects of competency.

3. The duration of time to assess the demonstration is clearly indicated, for example, 3 hours. This information is shared with the Candidate along with other pertinent information such

as the sequence of tasks that he must follow, and the fact that he will be closely observed as the tasks are performed.

4. After the Candidate has performed the task, the Assessor will provide feedback to the Candidate on his performance.

5. The responsibility on finally deciding whether or not the Candidate was Competent or Not Yet Competent belongs to the accredited Assessor.

6. At the conclusion of the assessment, the Assessor will provide feedback on whether or not the Candidate was Competent or Not Yet Competent. S/He will also share information on next steps. These next steps include where to obtain the certificate related to the assessment or, if unsuccessful, how to re-try for competency within a specified period of time.

Roles and Responsibilities of Trainer

Prior to the assessment, you will have studied and become familiar with the Competency Standard for the industry occupation. You will also have met with or contacted the Assessor beforehand and discussed preparations and arrangements for the assessment. Your role will be to facilitate the assessment process and ensure all necessary resources are available, assisting the Assessor wherever possible. For example, once a draft spec has been produced by the Assessor, you will ensure it is fully consistent with the evidence plan and copied appropriately for use by both the Assessor and Candidate.

In addition to a confirming a suitable training venue and time, you will ensure that:

- Sufficient space is allotted for task work- square meters of work space enough for demonstration tasks to be carried out effectively and safely
- Fire extinguisher and safety equipment within reach if necessary
- Emergency procedures in place
- All necessary tools, equipment, and materials ready at hand
- All necessary machinery in good working order

Your duties include:

- **notifying** the Assessor and candidates of planned assessment events and their location
- **advising and assisting** the Assessor on planned assessment events
- **collecting** admission slips and signature sheets for assessment events
- **ensuring** all required forms and reporting mechanisms are in place and ready for distribution to the Assessor and to the Candidate
- **ensuring** all requisite forms are duly signed and forwarded to the SEIP Office, or certifying body

- **responding** to candidate queries and concerns such as re-assessment procedures
- **reconfiguring** workplace simulations so that candidates with disabilities are able to participate fully and without impediment
- **working** closely with the SEIP contact to ensure a successful assessment event

Roles and Responsibilities of Candidate

Prior to the assessment, you will have studied and become familiar with the Competency Standard for your industry.

1. Initially, you will be given information on the task you are to perform, and the estimated time you will require to perform it. These tasks are based on the critical aspects of competency related to the performance criteria within the approved Competency Standard.

Given the necessary instructions, and/or a task-related spec and the necessary tools, materials, and equipment, you will carry out and complete a work task. You will observe that there is:

- Sufficient space for working- square meters of work space enough for task to be carried out effectively and safely
- Fire extinguisher and safety equipment within reach if necessary
- Emergency procedures in place
- All necessary tools, equipment, and materials ready at hand
- All necessary machinery in good working order

2. Assessment is drawn and extracted from the relevant Unit of Competency based on the approved Competency Standard and on an Evidence plan (proof of competence) developed by the Assessor that clearly focuses on critical aspects of competency. The Evidence plan will be based on critical assessment tools such as demonstration/task; observation; oral questions.

3. The duration of time to assess the demonstration should be clearly indicated, for example, 3 hours. This information will be given to you along with other pertinent information such as the procedure or sequence of tasks that you must follow. It is important to note that you will be closely observed and assessed throughout the duration of your demonstration. You will be given time to ask questions and request clarification. You will also be given 10 minutes to familiarize yourself with the resources to be used in the assessment.

4. Based on your performance in demonstrating the task, you will be assessed by the Assessor to be Competent or Not Yet Competent. Regardless of the result you will be given feedback from the Assessor on your performance and the next steps.

5. After you have performed the task, the Assessor will provide feedback to you on your performance.

6. The responsibility on finally deciding whether or not you are Competent or Not Yet Competent belongs to the accredited Assessor.

7. At the conclusion of the assessment, the Assessor will provide feedback on whether or not you have been assessed to be **Competent** or **Not Yet Competent**. Both your signatures will be required on the Assessment Form. You will also be allowed to make comments on the Assessor's decision. The Assessor will then share information on next steps. These next steps include where to obtain the certificate related to the successful assessment or, if unsuccessful, how to re-try for competency within a specified period of time.

Section Three: Tools and Templates

This toolbox of Tools and Templates offers a wide range of assessment tools that will facilitate evidence gathering and other assessment-related needs. Evidence gathering, however, should not be limited to these tools and templates alone. The toolbox should be revised or expanded as necessary, to include other tools and templates that are deemed relevant.

- Demonstration Checklist
- Observation Checklist
- Oral Questions Checklist
- Evidence Plan (Overall Summary)
- Assessor Job Sheet and Specifications (Spec) Form
- Competency Assessment Results
- Assessor Planning Checklist Tool
- All About Questioning Techniques for Use in Assessment
- Quick Guide to Conducting Competency Assessments
- Assessor's Quick Start

Demonstration Checklist

Candidate's name:	
Assessor's name:	
Qualification:	
Project-Based Assessment Title	
Units of competency covered:	
Date of assessment:	
Time of assessment:	

Instructions for demonstration	
Please see attached Instruction for Demonstration (Candidate/Assessor)	
Supplies and Materials ▪ Please refer to attached specific instruction	Tools and equipment • Please refer to attached specific instruction

	✓ to show if evidence is demonstrated		
During the demonstration of skills, did the candidate:	Yes	No	N/A
•	☐	☐	☐
•	☐	☐	☐
•	☐	☐	☐
•	☐	☐	☐
•	☐	☐	☐
•	☐	☐	☐
•	☐	☐	☐
•	☐	☐	☐
•	☐	☐	☐
•	☐	☐	☐
•	☐	☐	☐
•	☐	☐	☐
•	☐	☐	☐
•	☐	☐	☐
•	☐	☐	☐

Observation Checklist

Candidate's name:			
Assessor's name:			
Date of Assessment:			
Unit of Competency:			
Code:			
Name of Workplace/Training Center			
Procedure to Follow:	Observe Candidate's performing the task, and following the spec- if a spec is provided		
During the demonstration of skills, did the Candidate do the following (List steps that reflect critical aspects of competency from performance criteria of Unit of Competency):			
		YES	**NO**
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
Candidate's performance was:	**COMPETENT**	**NOT YET COMPETENT**	
Feedback to Candidate:			
Candidate's Signature:			Date:
Assessor's Signature:			Date:

Oral Questions Checklist

Candidate's name:	
Assessor's name	
Date of Assessment:	
Assessment Venue:	
Unit of Competency:	
Reference Standard:	

The List of Questions below must be pegged to the competency demonstration test and may involve related specs for each Unit of Competency tested. Underpinning skills for Knowledge may also be reviewed for competent/non yet competent.

List of Questions	Satisfactory Response

Indicate Y or N in the box provided	YES	NO
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		

Feedback to Candidate:

Candidate's overall performance was (circle):	Satisfactory	Not Satisfactory
The Candidate's underpinning knowledge was (circle):	Satisfactory	Not Satisfactory

Assessor Signature:	Date:
Candidate Signature:	Date:

EVIDENCE PLAN: Overall Summary

QUALIFICATION:	
Project-Based Assessment Title	
Units of competency covered	

Ways in which evidence will be collected: [tick the column] The evidence must show that the candidate …..	Observation with Questioning	Demonstration with Questioning	Written Examination	Portfolio
•				
•				
•				
•				
•				
•				
•				
•				
•				
•				
•				
•				
•				
•				
•				
•				
•				

Assessor Job Sheet and Specifications (Spec) Form

This Spec is in reference to the_____ Standard, and has been developed by an Industry Representative/Assessor.

The Result* indicates either C for Competent, or NYC for Not Yet Competent.

Unit of Competency	Elements Reviewed	Critical Aspects of Competency Covered	Result*: C/NYC

JOB #1 Procedure for Developing Specification (Spec): List the steps involved in performing the task/spec successfully. It will cover, in logical order, the critical aspects of competency listed above that will determine if the candidate is **Competent** or **Not Yet Competent.**

1.	
2.	
3.	
4.	
5.	

Tools and Equipment Required for Spec completion: List all tools, equipment, and materials required in completing Job #1:

Tools	Equipment	Materials

Assessor Name: Date:

Competency Assessment Results

Candidate's name:	
Assessor's name	
Qualification Title:	
Date of Assessment:	
Assessment Venue:	
Reference Standard:	
Unit of Competency:	

Assessment Unit	Competent	Not Yet Competent

Assessor's Recommendation and Comments:

Overall Assessment:

Yes: The Candidate successfully met the required evidence/standards and demonstrated all of the competencies necessary for certification in the Qualification and Units of Competency listed above.

No: The Candidate did not meet the evidence requirements. Re-assessment is recommended.

Assessor Signature:	Date:
Candidate Signature:	Date:
Assessment Center Manager Signature:	

ASSESSMENT PLANNING CHECKLIST TOOL

Assessor's name:	
Date:	

Directions: Circle the 'Yes' or 'No' response to each item.

1.	The Assessor is familiar with the unit(s) of competency being assessed	Yes	No
2.	The Assessor has verified that the workplace or training center has the correct equipment, machinery, tools, and materials necessary to complete all of the relevant aspects of the unit of competency	Yes	No
3.	The Assessor has ensured that all materials and equipment were assembled and arranged in advance.	Yes	No
4.	The Assessor has all the necessary tools, templates, and specifications needed to assess the trainee including a variety of assessment tools covering practical demonstration, observation, oral question, and (where necessary) written tests relevant to the competency specified in the standard	Yes	No
5.	The Assessor has met with the trainer prior to the assessment event to discuss his/her role.	Yes	No
6.	The Assessor will discuss the performance test with the trainee and address any concerns prior to giving the test	Yes	No
7.	The Assessor will discuss and record with the trainee the results of their performance	Yes	No

Action to be taken on "No" responses:

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

Recording responses

When using oral questioning, you may need a tool that has a structured approach (see below) and also enables you to record a candidate's responses. If the candidate's response is insufficient the assessor should record why on the recording sheet or checklist. This provides information that can be used later, if necessary, to explain to the candidate where he or she needs to develop their skills and/or knowledge to achieve the required competence.

Recording sheet for oral questioning (template)

Candidate's Name		
Assessor or Observer's Name		
Unit of Competency)		
Code		
Date of Assessment		
Location		
Task/Procedure		
Questions to be Answered by candidate	Response/Answer*	Satisfactory (Yes/No)
What would you do if …		
What would you do if …		
What would you do if …		
How do you …		
What are …		
Why did you… (Clarification)		
Follow up Questions		
The candidate's knowledge was:	Satisfactory Unsatisfactory	
Feedback to candidate:		
Candidate signature:	Date:	
Assessor/Observer's Signature:	Date:	

ASSESSOR GUIDE TO CONDUCTING COMPETENCY ASSESSMENTS

1. BEFORE THE ASSESSMENT	2. DAY OF ASSESSMENT	3. DURING THE ASSESSMENT	4. POST ASSESSMENT
- Review unit(s) of competency to be assessed especially evidence to be collected against performance criteria - Ensure the workplace or training center complies with all safety requirements and that high risk areas are clearly marked - Identify/request essential assessment resources: • tools and equipment • supplies and materials • personal protective equipment • print resources and rating sheets • Have trainees contacted if they have to bring any resources for the assessment, e.g. logbook	-Verify attendance through signed attendance sheet - Provide overview of what is to happen throughout day Orient the trainees to: • purpose of assessment • qualification to be assessed • assessment procedures to be followed • address needs of trainees and provide information on evidence requirements and assessment process • make all announcements just before start of assessment	Give clear instructions to trainees on what they are required to do: • time limits and expectations • all equipment and tools must be of the same quality for all trainees • written and verbal instructions translated into local dialects as needed • encourage questions • avoid providing any assistance to trainees during assessment • stop process if accident imminent • keep focused on evidence being valid, reliable, fair, flexible, and safe • Record details of evidence collected	Provide feedback on outcome of assessment process re: • give clear feedback on assessment decision • provide information on overcoming any gaps in competency assessment • provide opportunity to discuss assessment process and outcome **Prepare required assessment reports:** • all rating sheets signed by trainee as well as Assessor • maintain records of assessment procedures, evidence collected, and assessment outcome • verify assessment results/outcomes with training center **Prepare** recommendations for issuance of national certificate

Assessor's Quick Start

1. Identify the Unit(s) of Competency from the Program Standard that you are going to assess.

2. Review the Critical Aspects of Competency from the Unit of Competency that will be the basis of your Evidence Guide.

3. Select the Assessment Tools that you will use to gather evidence.
    i. Demonstration Checklist
    ii. Observation Checklist
    iii. Oral Questions Checklist

4. Create spec sheet(s) for the Unit of Competency to be examined.

5. Review the assessment procedure with the Candidate and ask if there are any questions.

6. Complete the assessment using the assessment tools in the order above. You are free to use other tools as well if you wish.

7. Determine whether Candidate is **Competent** or **Not-Yet-Competent**

8. Complete all necessary record sheets.

9. Give feedback to the Candidate.

Demonstration Checklist: Explain Fundamentals Of Aluminum Materials And Processes

Candidate's name:	
Assessor's name:	

Qualification:	Aluminum Fabrication and Installation			
Project-Based Assessment Title				
Units of competency covered:	Explain Fundamentals Of Aluminum Materials And Processes			
Date of assessment:				
Time of assessment:				
Instructions for demonstration				
Please see attached Instruction for Demonstration (Candidate/Assessor)				
Supplies and Materials ▪ Please refer to attached specific instruction	Tools and equipment • Please refer to attached specific instruction			
		✓ to show if evidence is demonstrated		
During the demonstration of skills, did the candidate:		Yes	No	N/A
1. Describe the several properties of Aluminum materials.		☐	☐	☐
2. Outline the advantages and disadvantages of Aluminum materials used in construction application.		☐	☐	☐
3. Identify the fabrication processes for Aluminum profiles.		☐	☐	☐
		☐	☐	☐
		☐	☐	☐
		☐	☐	☐
		☐	☐	☐
		☐	☐	☐
		☐	☐	☐

Observation Checklist: Explain Fundamentals Of Aluminum Materials And Processes

Candidate's name:	
Assessor's name:	
Date of Assessment:	

Unit of Competency:	Explain Fundamentals Of Aluminum Materials And Processes		
Code:	**Code: SEIP-CON-ALU-1-0**		
Name of Workplace/Training Center			
Procedure to Follow:	Observe Candidate's performing the task, and following the spec- if a spec is provided		
During the demonstration of skills, did the Candidate do the following (List steps that reflect critical aspects of competency from performance criteria of Unit of Competency):			
		YES	**NO**
1. Describe the several properties of Aluminum materials.			
2. Outline the advantages and disadvantages of Aluminum materials used in construction application.			
3. Identify the fabrication processes for Aluminum profiles.			
Candidate's performance was:	**COMPETENT**	**NOT YET COMPETENT**	
Feedback to Candidate:			
Candidate's Signature:		Date:	
Assessor's Signature:		Date:	

Oral Questions Checklist: Explain Fundamentals Of Aluminum Materials And Processes

Candidate's name:	
Assessor's name:	

Date of Assessment:	
Assessment Venue:	
Unit of Competency:	Explain Fundamentals Of Aluminum Materials And Processes
Reference Standard:	Aluminum Fabrication and Installation

The List of Questions below must be pegged to the competency demonstration test and may involve related specs for each Unit of Competency tested. Underpinning skills for Knowledge may also be reviewed for Competent/Not Yet Competent designation.

List of Questions	Satisfactory Response

Indicate Y or N in the box provided	YES	NO
1. Can you state at least eight properties of Aluminum ?		
2. What are several uses of Aluminum ?		
3. Can you briefly describe seven fabrication processes?		
4. What are five advantages of Aluminum use?		
5. What are four disadvantages of Aluminum use?		

Feedback to Candidate:

The Candidate's overall performance was (circle): Satisfactory/ Not Satisfactory

The Candidate's underpinning knowledge was (circle): Satisfactory/ Not Satisfactory

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

Demonstration Checklist: Cut Aluminum Profile Materials

Candidate's name:	
Assessor's name:	
Qualification:	Aluminum Fabrication and Installation

Project-Based Assessment Title	
Units of competency covered:	Cut Aluminum Profile Materials
Date of assessment:	
Time of assessment:	

Instructions for demonstration	
Please see attached Instruction for Demonstration (Candidate/Assessor)	
Supplies and Materials ▪ Please refer to attached specific instruction	Tools and equipment • Please refer to attached specific instruction

	✓ to show if evidence is demonstrated		
During the demonstration of skills, did the candidate:	Yes	No	N/A
1. Prepare machines and work area for safe operation in accordance with workplace requirements.	☐	☐	☐
2. Perform cutting of Aluminum materials following plans and specifications.	☐	☐	☐
3. Finish cut ends of Aluminum materials in accordance with workplace/work plan specifications.	☐	☐	☐
4. Clean and maintain tools, equipment, and work area in accordance with workplace requirements.	☐	☐	☐
	☐	☐	☐
	☐	☐	☐
	☐	☐	☐
	☐	☐	☐
	☐	☐	☐

Observation Checklist: Cut Aluminum Profile Materials

Candidate's name:	
Assessor's name:	
Date of Assessment:	
Unit of Competency:	Cut Aluminum Profile Materials

Code:	**Code: SEIP-CON-ALU-2-0**		
Name of Workplace/Training Center			
Procedure to Follow:	Observe Candidate's performing the task, and following the spec- if a spec is provided		
During the demonstration of skills, did the Candidate do the following (List steps that reflect critical aspects of competency from performance criteria of Unit of Competency):			
		YES	**NO**
1. Prepare machines and work area for safe operation in accordance with workplace requirements.			
2. Perform cutting of Aluminum materials following plans and specifications.			
3. Finish cut ends of Aluminum materials in accordance with workplace/work plan specifications.			
4. Clean and maintain tools, equipment, and work area in accordance with workplace requirements.			
Candidate's performance was:	**COMPETENT**	**NOT YET COMPETENT**	
Feedback to Candidate:			
Candidate's Signature:			Date:
Assessor's Signature:			Date:

Oral Questions Checklist: Cut Aluminum Profile Materials

Candidate's name:	
Assessor's name:	
Date of Assessment:	

Assessment Venue:	
Unit of Competency:	Cut Aluminum Profile Materials
Reference Standard:	Aluminum Fabrication and Installation

The List of Questions below must be pegged to the competency demonstration test and may involve related specs for each Unit of Competency tested. Underpinning skills for Knowledge may also be reviewed for Competent/Not Yet Competent designation.

List of Questions	Satisfactory Response

Indicate Y or N in the box provided	YES	NO
1. Can you identify eight machines used in working with Aluminum ?		
2. What are four common hazards in working with Aluminum ?		
3. Can you state four processes used in working with Aluminum ?		
4. How are the cut ends of Aluminum materials finished?		
5. Why is it important to keep and maintain a clean work area?		

Feedback to Candidate:

The Candidate's overall performance was (circle): Satisfactory/ Not Satisfactory

The Candidate's underpinning knowledge was (circle): Satisfactory/ Not Satisfactory

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

Demonstration Checklist: Fabricate And Install Aluminum Windows And Glass

Candidate's name:	

Assessor's name:	
Qualification:	Aluminum Fabrication and Installation
Project-Based Assessment Title	
Units of competency covered:	Fabricate And Install Aluminum Windows And Glass
Date of assessment:	
Time of assessment:	

Instructions for demonstration	
Please see attached Instruction for Demonstration (Candidate/Assessor)	
Supplies and Materials ▪ Please refer to attached specific instruction	Tools and equipment • Please refer to attached specific instruction

	✓ to show if evidence is demonstrated		
During the demonstration of skills, did the candidate:	Yes	No	N/A
1. Identify work requirements for Aluminum window and glass fabrication and installation in accordance with workplace specifications.	☐	☐	☐
2. Prepare for work in accordance with workplace requirements.	☐	☐	☐
3. Fabricate Aluminum structure for windows in accordance with work plan/drawing specifications.	☐	☐	☐
4. Install Aluminum windows and glass following workplace requirements.	☐	☐	☐
5. Clean and maintain tools, equipment, and work area in accordance with workplace policy.	☐	☐	☐
	☐	☐	☐
	☐	☐	☐
	☐	☐	☐
	☐	☐	☐

Observation Checklist: Fabricate And Install Aluminum Windows And Glass

Candidate's name:	

Assessor's name:	
Date of Assessment:	
Unit of Competency:	Fabricate And Install Aluminum Windows And Glass
Code:	**Code: SEIP-CON-ALU-3-0**
Name of Workplace/Training Center	
Procedure to Follow:	Observe Candidate's performing the task, and following the spec- if a spec is provided

During the demonstration of skills, did the Candidate do the following (List steps that reflect critical aspects of competency from performance criteria of Unit of Competency):

	YES	NO
1. work requirements for Aluminum window and glass fabrication and installation in accordance with workplace specifications.		
2. Prepare for work in accordance with workplace requirements.		
3. Fabricate Aluminum structure for windows in accordance with work plan/drawing specifications.		
4. Install Aluminum windows and glass following workplace requirements.		
5. Clean and maintain tools, equipment, and work area in accordance with workplace policy.		

Candidate's performance was:	**COMPETENT**	**NOT YET COMPETENT**	
Feedback to Candidate:			
Candidate's Signature:			Date:
Assessor's Signature:			Date:

Oral Questions Checklist: Fabricate And Install Aluminum Windows And Glass

Candidate's name:	
Assessor's name:	
Date of Assessment:	
Assessment Venue:	
Unit of Competency:	Fabricate And Install Aluminum Windows And Glass
Reference Standard:	Aluminum Fabrication and Installation

The List of Questions below must be pegged to the competency demonstration test and may involve related specs for each Unit of Competency tested. Underpinning skills for Knowledge may also be reviewed for Competent/Not Yet Competent designation.

List of Questions	Satisfactory Response

Indicate Y or N in the box provided	YES	NO
1. What activities are involved in preparing for work?		
2. Can you describe the procedure followed for fabricating Aluminum structure for windows?		
3. Can you describe the procedure followed for installing windows and glass?		
4. Can you identify eight types/class of Aluminum profile?		
5. What are seven common methods of assembly used in Aluminum work?		
6. Can you describe the various types of glass used in Aluminum work and their respective uses?		

Feedback to Candidate:

The Candidate's overall performance was (circle): Satisfactory/ Not Satisfactory

The Candidate's underpinning knowledge was (circle): Satisfactory/ Not Satisfactory

Assessor Signature:	Date:
Candidate Signature:	Date:

Demonstration Checklist: Fabricate And Install Aluminum Doors And Glass

Candidate's name:	
Assessor's name:	
Qualification:	Aluminum Fabrication and Installation
Project-Based Assessment Title	
Units of competency covered:	Fabricate And Install Aluminum Doors And Glass
Date of assessment:	
Time of assessment:	

Instructions for demonstration	
Please see attached Instruction for Demonstration (Candidate/Assessor)	
Supplies and Materials ▪ Please refer to attached specific instruction	Tools and equipment • Please refer to attached specific instruction

	✓ to show if evidence is demonstrated		
During the demonstration of skills, did the candidate:	Yes	No	N/A
1. Identify work requirements for Aluminum doors and glass fabrication and installation in accordance with workplace specifications.	☐	☐	☐
2. Prepare for work in accordance with workplace requirements.	☐	☐	☐
3. Fabricate Aluminum structure for doors in accordance with work plan/drawing specifications.	☐	☐	☐
4. Install Aluminum doors and glass following workplace requirements.	☐	☐	☐
5. Clean and maintain tools, equipment, and work area in accordance with workplace policy.	☐	☐	☐
	☐	☐	☐
	☐	☐	☐
	☐	☐	☐
	☐	☐	☐

Observation Checklist: Fabricate And Install Aluminum Doors And Glass

Candidate's name:	
Assessor's name:	
Date of Assessment:	
Unit of Competency:	Fabricate And Install Aluminum Doors And Glass
Code:	**Code: SEIP-CON-ALU-4-0**
Name of Workplace/Training Center	
Procedure to Follow:	Observe Candidate's performing the task, and following the spec- if a spec is provided

During the demonstration of skills, did the Candidate do the following (List steps that reflect critical aspects of competency from performance criteria of Unit of Competency):

	YES	NO
1. Identify work requirements for Aluminum doors and glass fabrication and installation in accordance with workplace specifications.		
2. Prepare for work in accordance with workplace requirements.		
3. Fabricate Aluminum structure for doors in accordance with work plan/drawing specifications.		
4. Install Aluminum doors and glass following workplace requirements.		
5. Clean and maintain tools, equipment, and work area in accordance with workplace policy.		

Candidate's performance was:	**COMPETENT**	**NOT YET COMPETENT**
Feedback to Candidate:		

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

Oral Questions Checklist: Fabricate And Install Aluminum Doors And Glass

Candidate's name:	
Assessor's name:	
Date of Assessment:	
Assessment Venue:	
Unit of Competency:	Fabricate And Install Aluminum Doors And Glass
Reference Standard:	Aluminum Fabrication and Installation

The List of Questions below must be pegged to the competency demonstration test and may involve related specs for each Unit of Competency tested. Underpinning skills for Knowledge may also be reviewed for Competent/Not Yet Competent designation.

List of Questions	Satisfactory Response

Indicate Y or N in the box provided	YES	NO
1. What is the procedure followed for fabricating Aluminum structure for doors?		
2. What is the procedure followed for installing Aluminum door and glass?		
3. What are ten common shapes of Aluminum profile?		
4. Why is it important to maintain a clean work area?		
5. To what extent and why is safety a priority in Aluminum work?		

Feedback to Candidate:

The Candidate's overall performance was (circle): Satisfactory/ Not Satisfactory

The Candidate's underpinning knowledge was (circle): Satisfactory/ Not Satisfactory

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

Demonstration Checklist: Fabricate And Install Aluminum Partition And Glass

Candidate's name:	
Assessor's name:	
Qualification:	Aluminum Fabrication and Installation
Project-Based Assessment Title	
Units of competency covered:	Fabricate And Install Aluminum Partition And Glass
Date of assessment:	
Time of assessment:	

Instructions for demonstration	
Please see attached Instruction for Demonstration (Candidate/Assessor)	
Supplies and Materials ▪ Please refer to attached specific instruction	Tools and equipment • Please refer to attached specific instruction

	✓ to show if evidence is demonstrated		
During the demonstration of skills, did the candidate:	Yes	No	N/A
1. Identify work requirements for Aluminum partition/wall and glass fabrication and installation in accordance with workplace specifications.	☐	☐	☐
2. Prepare for work in accordance with workplace requirements.	☐	☐	☐
3. Fabricate Aluminum structure for partition/wall in accordance with work plan/drawing specifications.	☐	☐	☐
4. Install Aluminum partition/wall and glass following workplace requirements.	☐	☐	☐
5. Clean and maintain tools, equipment, and work area in accordance with workplace policy.	☐	☐	☐
	☐	☐	☐
	☐	☐	☐
	☐	☐	☐
	☐	☐	☐

Observation Checklist: Fabricate And Install Aluminum Partition And Glass

Candidate's name:			
Assessor's name:			
Date of Assessment:			
Unit of Competency:	Fabricate And Install Aluminum Partition And Glass		
Code:	**Code: SEIP-CON-ALU-5-0**		
Name of Workplace/Training Center			
Procedure to Follow:	Observe Candidate's performing the task, and following the spec- if a spec is provided		
During the demonstration of skills, did the Candidate do the following (List steps that reflect critical aspects of competency from performance criteria of Unit of Competency):			
		YES	**NO**
1. Identify work requirements for Aluminum partition/wall and glass fabrication and installation in accordance with workplace specifications.			
2. Prepare for work in accordance with workplace requirements.			
3. Fabricate Aluminum structure for partition/wall in accordance with work plan/drawing specifications.			
4. Install Aluminum partition/wall and glass following workplace requirements.			
5. Clean and maintain tools, equipment, and work area in accordance with workplace policy.			
Candidate's performance was:	**COMPETENT**	**NOT YET COMPETENT**	
Feedback to Candidate:			
Candidate's Signature:		Date:	

Assessor's Signature:	Date:

Oral Questions Checklist: Fabricate And Install Aluminum Partition And Glass

Candidate's name:	
Assessor's name:	
Date of Assessment:	
Assessment Venue:	
Unit of Competency:	Fabricate And Install Aluminum Partition And Glass
Reference Standard:	Aluminum Fabrication and Installation

The List of Questions below must be pegged to the competency demonstration test and may involve related specs for each Unit of Competency tested. Underpinning skills for Knowledge may also be reviewed for Competent/Not Yet Competent designation.

List of Questions	Satisfactory Response

Indicate Y or N in the box provided	YES	NO
1. Can you describe the procedure for fabricating Aluminum structure for glass partition/wall?		
2. Can you describe the procedure for installing Aluminum partition/wall and glass?		
3. What activities are involved in preparing for work?		
4. Can you describe cutting techniques of various types of glass?		
5. How important and why is compliance to workplace specifications?		

Feedback to Candidate:

The Candidate's overall performance was (circle): Satisfactory/ Not Satisfactory

The Candidate's underpinning knowledge was (circle): Satisfactory/ Not Satisfactory

Assessor Signature:	Date:
Candidate Signature:	Date:

Demonstration Checklist: Fabricate And Install Aluminum False Ceiling

Candidate's name:	
Assessor's name:	
Qualification:	Aluminum Fabrication and Installation
Project-Based Assessment Title	
Units of competency covered:	Fabricate And Install Aluminum False Ceiling
Date of assessment:	
Time of assessment:	

Instructions for demonstration	
Please see attached Instruction for Demonstration (Candidate/Assessor)	
Supplies and Materials ▪ Please refer to attached specific instruction	Tools and equipment • Please refer to attached specific instruction

	✓ to show if evidence is demonstrated		
During the demonstration of skills, did the candidate:	Yes	No	N/A
1. Identify work requirements for Aluminum false ceiling fabrication and installation in accordance with workplace specifications.	☐	☐	☐
2. Prepare for work in accordance with workplace requirements.	☐	☐	☐
3. Fabricate Aluminum structure for false ceiling in accordance with work plan/drawing specifications.	☐	☐	☐
4. Install false ceiling following workplace requirements.	☐	☐	☐
5. Install false ceiling board/tiles in accordance with workplace specifications.	☐	☐	☐
6. Clean and maintain tools, equipment, and work area in accordance with workplace policy.	☐	☐	☐
	☐	☐	☐
	☐	☐	☐
	☐	☐	☐

Observation Checklist: Fabricate And Install Aluminum False Ceiling

Candidate's name:			
Assessor's name:			
Date of Assessment:			
Unit of Competency:	Fabricate And Install Aluminum False Ceiling		
Code:	**Code: SEIP-CON-ALU-6-0**		
Name of Workplace/Training Center			
Procedure to Follow:	Observe Candidate's performing the task, and following the spec- if a spec is provided		
During the demonstration of skills, did the Candidate do the following (List steps that reflect critical aspects of competency from performance criteria of Unit of Competency):			
		YES	**NO**
1. Identify work requirements for Aluminum false ceiling fabrication and installation in accordance with workplace specifications.			
2. Prepare for work in accordance with workplace requirements.			
3. Fabricate Aluminum structure for false ceiling in accordance with work plan/drawing specifications.			
4. Install false ceiling following workplace requirements.			
5. Install false ceiling following workplace requirements.			
6. Clean and maintain tools, equipment, and work area in accordance with workplace policy			
Candidate's performance was:	**COMPETENT**	**NOT YET COMPETENT**	
Feedback to Candidate:			
Candidate's Signature:			Date:
Assessor's Signature:			Date:

Oral Questions Checklist: Fabricate And Install Aluminum False Ceiling

Candidate's name:	
Assessor's name:	
Date of Assessment:	
Assessment Venue:	
Unit of Competency:	Fabricate And Install Aluminum False Ceiling
Reference Standard:	Aluminum Fabrication and Installation

The List of Questions below must be pegged to the competency demonstration test and may involve related specs for each Unit of Competency tested. Underpinning skills for Knowledge may also be reviewed for Competent/Not Yet Competent designation.

List of Questions	Satisfactory Response

Indicate Y or N in the box provided	YES	NO
1. Can you describe five steps to follow when installing Aluminum structure for false ceiling and board?		
2. Can you describe four steps to follow when fabricating Aluminum structure for false ceiling?		
3. What are seven methods of assembly used in Aluminum work?		
4. Can you identify eight types of ceiling board?		
5. To what extent and why should safety be a priority in Aluminum work?		

Feedback to Candidate:

The Candidate's overall performance was (circle): Satisfactory/ Not Satisfactory

The Candidate's underpinning knowledge was (circle): Satisfactory/ Not Satisfactory

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