



Skills for Employment Investment Program (SEIP)

COMPETENCY-BASED LEARNING MATERIAL (FACULTY GUIDE)

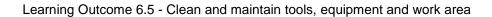
FOR

ALUMINIUM FABRICTION AND INSTALLATION (CONSTRUCTION SECTOR)

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

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Copyright

The Competency-based Learning Material (Faculty Guide) for Aluminium Fabrication and Installation is a document, aligned to its applicable competency standard, for providing training consistent with the requirements of industry in order for individuals who graduated through the established standard via competency-based assessment to be suitably qualified for a relevant job.

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Approval Sheet

Identification and validation of modules and content for this occupation were made by experts within this sector. A series of consultations were held to accurately capture industry and employer needs and expectations and develop the learning material that would help to enhance the employability of the youth trained. This process started on 8 July 2018 and concluded with a validation workshop with a sectoral working group on 2 October 2018.

Experts Involved

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Validation Workshop

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Committee Workshop

The National competency-based learning material for National Skills Certificate in Aluminium Fabrication and Installation, NTVQF Level [INSERT LEVEL] qualification is a document developed by the Skill for Employment Investment Programme (SEIP), Finance Division, Ministry of Finance. This competency-based learning material has been developed by an industry expert group under guidance of SEIP. The competency-based learning material was approved by the SCDC [BTEB to insert date] at NTVQF Cell, BTEB.

Respectable members of the SCDC:

Aluminium Fabrication and Installation - Level [INSERT LEVEL]	

How to Use this Competency-based Learning Material

Welcome to the competency-based learning material for Aluminium Fabrication and Installation for use in Textile works. These modules contain training materials and activities for learners to complete in order to become competent and qualified as a skilled worker.

There are <u>six (6) modules</u> that make up this course which comprises the skills, knowledge and attitudes required to become a skilled worker including:

- 1. Explain fundamentals of aluminium materials and processes
- 2. Cut aluminium profile materials
- 3. Fabricate and install aluminium windows and glass
- 4. Fabricate and install aluminium doors and glass
- 5. Fabricate and install aluminium partition and glass
- 6. Fabricate and install aluminium false ceiling

As a trainer, you are required to guide the learners through a series of activities in order to complete each learning outcome of the module. These activities may be completed as part of structured classroom activities or they may be required to work at their own pace.

These activities will require the learners to complete associated learning and practice activities in order to gain knowledge and skills they need to achieve the learning outcomes. Refer to **Learning Activity Page of each module** to know the sequence of learning tasks and the appropriate resources to use for each task.

This page will serve as the road map towards the achievement of competence. If you read the **Information Sheets**, these will give you an understanding of the work, and why things are done the way they are. Once the learners have finished reading the Information Sheets, they are required to complete the questions in the **Self-Check Sheets**.

The self-check process follows the Information Sheets in the learning guide. Completing self-checks will help the learners know how they are progressing. To know how they fared with self-checks, they can review the **Answer Key**.

The learners are required to complete all activities as directed in the **Job Sheet**. This is where they will apply their newly acquired knowledge while developing new skills. When working, high emphasis should be laid on safety requirements. The learners should be encouraged to raise relevant queries or ask the facilitator for assistance as required.

When the learners have completed all the tasks required in the learning guide, an assessment event will be scheduled to evaluate if they have achieved competency of the specified learning outcomes and are ready for the next task.

Introduction to Teaching Adult Learners

Since you will be dealing with adult learners, it is important to understand the basic principles of adult learning and methodologies. Adults learn best through associations, experiences and application. A few facts to consider while teaching adult learners:

Discussion: Adult learning is best managed through mutual dialogue and discussion. Discussion needs to be encouraged and used in the classroom to maximise learning.

Associations: Adults have experiences which can be related to any learning objectives to create associations which enhance conceptual comprehension. Associations can be used to create user interest and gain attention. Adults learn new attitudes or skills best in relation to previous life experiences.



This strategy also ensures knowledge retention.

Create an environment conducive to learning and sharing: Make people feel comfortable talking to you and each other. They should feel at ease asking questions, sharing views even if they are not very sure of the efficacy of their suggestions or views.

Physical surroundings: Temperature, light, space and furniture should be optimal. There should be no distractions.

Inculcate respect: Encourage learners' contributions and experiences. People are more encouraged to learn and share when their experiences are acknowledged - new information builds easily on past knowledge and experience.

Reward and recognition: Acknowledging the efforts of people, even small attempts, can reap great benefits. Learners like to receive praise and positive encouragement, which motivates them to deliver their best.

Learners also like to be reassured that they are correctly recalling or using information they have absorbed in the classroom.

Structured teaching: Learners study faster when information or skills are presented in a structured way:

- Concepts to be taught in small, bite sized portions for easy assimilation
- Put forth the easiest ideas or skills first and then gradually build on them
- Bring in the important ideas first
- Reinforce key ideas at regular intervals
- Reinforce high order concepts at regular intervals

Move learner from generic to specific flow of information: Introduce the generic concepts first and then move to specific more complex information to ease understanding and comprehension.

Application of concepts/ideas taught: Help students put into practice the concepts taught in the class through exercises and work-based projects. Application ensures knowledge retention and skill building.

Relevance building: Build up relevance of the concepts being taught in class by relating them to day-to-day life and workplace experiences.

Learners should know to use and apply what they have learned in the classroom as they learn faster when they recognise that what they are learning will be useful in the future.

Sharing: Encourage learners to learn from each other and solve problems collectively. This makes learning easier and improves team spirit and the interpersonal skills of the learners.

Participation: Involve learners in the class - adults favour to be *active participants* in learning rather than passive receivers of knowledge. People learn faster when they actively process information, solve problems and practice skills.

Motivate: Inspire the class so that teaching does not become a one-way process of knowledge download. Learners will learn faster when they feel an inner urge to learn and be an active participant in the class.

Create a learning environment in which the learners feel free and able to shed their inhibitions and develop receptivity towards new ideas and concepts.

Students will have different motivation levels - some will be more eager to learn than others as each leaner is different from the other and therefore need to be treated differently.

And remember - adapt your communication style to suit the needs of the audience.

Communicate effectively: Communicate in a manner that is understood by the class. The language and sentence structuring should be clear and succinct.

Technical concepts should be explained in a manner that de-mystifies the concept - make things simple and easy to understand.

Avoid using *too much* technical jargon - if it is part of the curriculum, ensure the class is first made familiar with the words or jargon used.

Assessments: Conduct skill and knowledge checks regularly:

- Reinforce high order concepts at regular intervals.
- Conduct formative and summative assessments.
- Strengthen areas which appear to be weak.

Regular feedback:

- Provide regular feedback to learners
- Help them identify their strengths and areas of improvement
- Feedback should always be constructive
- Timely and specific feedback is easier to accept and act on



List of Icons

Icon Name	Icon
Module content	
Learning outcomes	
Performance criteria	
Contents	
Assessment criteria	A ⁺ >
Resources required	
Information sheet	
Self-check Quiz	
Answer key	- 38
Activity	Activity
Video reference	*
Learner job sheet	
Assessment plan	
Review of competency	

Module 1: Explain fundamentals of aluminium materials and processes

Module Descriptor:	This module covers the skills, knowledge and attitudes to explain fundamentals of aluminium materials and processes. It specifically includes describing the properties of aluminium materials and identifying the fabrication processes for aluminium profiles.		
Nominal Duration:	24 ho	24 hours	
Learning Outcomes:	1.1.	Describe the properties of aluminium materials	
	1.2.	Identify the fabrication processes for aluminium profiles	
Performance Criteria:	1.1.	Properties of aluminium materials are identified.	
	1.2.	Uses of Aluminium in the construction sector is identified.	
	1.3.	Advantages and disadvantages of aluminium materials in construction application is explained.	
	1.4.	Aluminium production by extrusion method is identified.	



Learning Outcome 1.1 – Describe the Properties of Aluminium Materials

Contents:	 Properties of aluminium Uses of aluminium in the construction sector Advantages and disadvantages of aluminium materials in construction application 		
Resources Required:		inium materials ogue/magazine related to aluminium profile materials	
Learning Activities:	Activity Resource Student Guide Page		
	1.1	Information Sheet 1.1.1Self-Check Quiz 1.1.1Answer Key 1.1.1	8 9 14
		www.aalco.co.uk//Aluminium-Alloy_Introduction-to-Aluminium-and-its-alloys_9.a	
Assessment Criteria:	 Properties of aluminium materials are identified Uses of Aluminium in the construction sector is identified Advantages and disadvantages of aluminium materials in construction application is explained 		



Learning Outcome 1.2 – Identify the Fabrication Processes for Aluminium Profiles

Contents:		inium extrusion method and process cation processes for aluminium		
Resources Required:	■ Print	Print copy/drawing of fabrication processes for aluminium profiles		
Learning Activities:	Activity	Activity Resource Student Guide Pag		
	1.2	 Information Sheet 1.2.1 Self-Check Quiz 1.2.1 Answer Key 1.2.1 http://en.wikipedia.org/wiki/Extrusion 	11 13 14	
Assessment Criteria:		inium production by extrusion method is identified cation processes for aluminium profiles are identifie	d	

Module 2: Cut aluminium profile materials

Module Descriptor:	This module covers the knowledge, skills and attitudes to cut aluminium profile materials. It specifically includes preparing machines and work area for safe operation, performing cutting of aluminium materials, finishing cut ends of aluminium materials and cleaning and maintaining tools, equipment and work area.		
Nominal Duration:	40 hou	urs	
Learning Outcomes:	2.1.	Prepare machines and work area for safe operation	
	2.2.	Perform cutting of aluminium materials	
	2.3.	Finish cut ends of aluminium ends	
	2.4.	Clean and maintain tools, equipment and work area	
Performance Criteria:	2.1.	Machines used for aluminium fabrication works are prepared and checked for operating condition.	
	2.2.	Tools and personal protective equipment (PPE) are gathered and check for usability.	
	2.3.	Work area is cleaned and prepared for safe cutting operation.	
	2.4.	Recommended aluminium cutting equipment and tools are used to cut aluminium profiles safely.	
	2.5.	Hazards associated when performing aluminium cutting and grinding work is identified.	
	2.6.	Personal protective equipment is used when cutting aluminium materials.	
	2.7.	Cutting of aluminium materials is performed in accordance with workplace requirements.	
	2.8.	Appropriate processes are carried out on an aluminium end after cutting.	
	2.9.	Cut ends of aluminium materials are finished in accordance with workplace/work plan specification.	
	2.10.	PPE, tools and equipment are cleaned and checked for usability.	
	2.11.	Work area is cleaned in accordance with workplace requirements.	
	2.12.	Tools, equipment and PPE are stored in accordance with workplace policy.	



Learning Outcome 2.1 – Prepare Machines and Work Area for Safe Operation

Contents:	 Machines used for aluminium fabrication works 				
	 Uses of tools and personal protective equipment (PPE) 				
Resources Required:		rromplace (emiliated of detaal)			
riocom coo rioquii cui		onal protective equipment (PPE): hard hat (heln			
		, face shield, face mask, respirator, hand glove	s, apron (vest),		
		y shoes, ear plug, safety belt			
		: measuring tape, steel rule, tri-square, mark			
		saw, wrenches, tin snip, drill bits, plastic hamm			
		spirit level, plumb bob, screwdrivers, sealant			
	•	lines, scriber, glass cutter (diamond tip), glass	s file set, glass		
		er, centre punch	ini madila		
		oment: pneumatic circular saw, band saw, alu	•		
		g machine, mitering jig, deburring machine, wor s, bending machine, portable grinder	k benches, anii		
	piess	s, bending machine, portable grinder			
Learning Activities:	Activity	Resource	Student Guide		
	,		Page		
	2.1	 Information Sheet 2.1.1 	16		
		■ Information Sheet 2.1.2	19		
		 Information Sheet 2.1.3 	21		
		Self-Check Quiz 2.1.1	19		
		Self-Check Quiz 2.1.2	21		
		Self-Check Quiz 2.1.3	22		
		Answer Key 2.1.1	32		
		Answer Key 2.1.2	32		
		Answer Key 2.1.3	32		
Accoment Criteria	Machines used for aluminium fabrication works are prepared and				
Assessment Criteria:	checked for operating condition				
	Tools and personal protective equipment (PPE) are gathered and				
	check for usability				
	 Work area is cleaned and prepared for safe cutting operation 				



Learning Outcome 2.2 – Perform Cutting of Aluminium Materials

Contents:	■ Haza	ards in aluminium cutting and grinding work		
Resources Required:	 Workplace (simulated or actual) Personal protective equipment (PPE): hard hat (helmet), safety eye glass, face shield, face mask, respirator, hand gloves, apron (vest), safety shoes, ear plugs, safety belt Tools: measuring tape, steel rule, tri-square, marking pen/pencil, hacksaw, wrenches, tin snip, drill bits, plastic hammer, combination plier, spirit level, plumb bob, screwdrivers, sealant gun, rivet gun, string lines, scriber, glass cutter (diamond tip), glass file set, glass holder, centre punch Equipment: pneumatic circular saw, band saw, aluminium profile cutting machine, mitering jig, deburring machine, work benches, drill press, bending machine, portable grinder 			
Learning Activities:	Activity	Resource	Student Guide Page	
	2.2	 Information Sheet 2.2.1 Self-Check Quiz 2.2.1 Answer Key 2.2.1 	23 25 32	
Assessment Criteria:	 Recommended aluminium cutting equipment and tools are used to cut aluminium profiles safely Hazards associated when performing aluminium cutting and grinding work is identified Personal protective equipment is used when cutting aluminium materials. Cutting of aluminium materials is performed in accordance with workplace requirements 			



Learning Outcome 2.3 – Finish Cut Ends of Aluminium Materials

Contents:	Appro	Appropriate processes			
Resources Required:	 Workplace (simulated or actual) Personal protective equipment (PPE): hard hat (helmet), safety eye glass, face shield, face mask, respirator, hand gloves, apron (vest), safety shoes, ear plugs, safety belt Tools and equipment: files, sand paper, reamer 				
Learning Activities:	Activity	Resource	Student Guide Page		
	2.3	Information Sheet 2.3.1Self-Check Quiz 2.3.1Answer Key 2.3.1	26 27 32		
		https://en.wikipedia.org/wiki/Burr_(edge)			
		https://en.wikipedia.org/wiki/Filing_(metalworking)			
		https://en.wikipedia.org/wiki/Chamfer			
		https://en.wikipedia.org/wiki/Miter_joint			
Assessment Criteria:	■ Cut e	priate processes are carried out on an aluminium on the processes are carried out on an aluminium on the prize of aluminium materials are finished in a clace/work plan specification			



Learning Outcome 2.4 – Clean and maintain tools, equipment and work area

Contents: Resources Required:	MethodStorirWorkPersonshoes	 Methods of cleaning, tools and equipment required for cleaning Storing of tools and equipment used Workplace (simulated or actual) Personal protective equipment (PPE): gloves, dust mask, safety shoes, hard hat, belt/body harness, goggles, working clothes, apron, 				
	 Tools mops 	mops, waste containers and cotton rags				
Learning Activities:	Activity	Resource	Student Guide Page			
	2.4	 Information Sheet 2.4.1 Self-Check Quiz 2.4.1 Answer Key 2.4.1 https://en.wikipedia.org/wiki/Cleaning_agent https://www.hunker.com/12406192/how-to-store-tools-equipment 	28 31 33			
Assessment Criteria:	Work	tools and equipment are cleaned and checked f area is cleaned in accordance with workplace re s, equipment and PPE are stored in accordance	equirements			

Module 3: Fabricate and install aluminium windows and glass

Module Descriptor:	This module covers the skills, knowledge and attitudes to fabricate and install aluminium windows with glass. It specifically includes identifying work requirements, preparing for work, fabricating aluminium structure for windows, installing aluminium windows and glass and cleaning and maintaining tools, equipment and work area.			
Nominal Duration:	56 hou	56 hours		
Learning Outcomes:	3.1.	Identify work requirements		
	3.2.	Prepare for work		
	3.3.	Fabricate aluminium structure for windows		
	3.4.	Install aluminium windows and glass		
	3.5.	Clean and maintain tools, equipment and work area		
Performance Criteria:	3.1.	Dimensions of aluminium windows are identified in accordance with workplace plan/drawing and specifications.		
	3.2.	Types/classification of aluminium profile for window is identified in accordance with workplace plan/drawing and specifications.		
	3.3.	Shape of aluminium profile for window and glass works is determined.		
	3.4.	Work requirements are identified in accordance with workplace plan/drawing and specifications.		
	3.5. Tools and equipment are gathered and checked for usability working conditions.			
	3.6. Materials are gathered and checked for quality and comp to workplace specifications.			
	3.7.	Aluminium profile/materials are measured in accordance with work plan/drawing specifications.		
	3.8.	3.8. Aluminium profile/materials are cut in accordance with work plan/drawing specifications.		
	3.9.	Method of assembly of structure for windows is identified in accordance with workplace plan/drawing specifications.		
	3.10.	Assembly of aluminium structure for windows is performed in accordance with plans/drawings.		
	3.11.	Aluminium window frame/structure is installed on location in accordance with workplace requirement.		
	3.12.	Aluminium window frame/structure is fixed on location in accordance with workplace requirements.		
	3.13.	Type of glass and size to be installed is identified in accordance with work plan/drawing specification.		
	3.14.	Glasses are cut to specified dimension in accordance with work plan/drawing specification.		
	3.15.	Glasses are installed into the aluminium window frame/structure safely and in accordance with workplace requirements.		
	3.16.	PPE, tools and equipment are cleaned and checked for usability.		

3.17.	Work area is cleaned in accordance with workplace requirements.
3.18.	Tools, equipment and PPE are stored in accordance with workplace policy.



Learning Outcome 3.1 – Identify Work Requirements

Contents:	 Types/classification of aluminium profile for window Shape of aluminium profile for window 					
Resources Required:	■ Alum	inium profile materials for windows				
Learning Activities:	Activity	Activity Resource Student Guide Page				
	3.1	Information Sheet 3.1.1Self-Check Quiz 3.1.1Answer Key 3.1.1	36 37 49			
Assessment Criteria:	work Type accor Shap	 Dimensions of aluminium windows are identified in accordance with workplace plan/drawing and specifications Types/classification of aluminium profile for window is identified in accordance with workplace plan/drawing and specifications Shape of aluminium profile for window and glass works is determined 				



Learning Outcome 3.2 – Prepare for Work

Contents:		and equipment nium materials		
Resources Required:	 Workplace (simulated or actual) Personal protective equipment (PPE): hard hat (helmet), safety eye glass, face shield, face mask, respirator, hand gloves, apron (vest), safety shoes, ear plugs, safety belt Tools: measuring tape, steel rule, tri-square, marking pen/pencil, hacksaw, wrenches, tin snip, drill bits, plastic hammer, combination plier, spirit level, plumb bob, screwdrivers, sealant gun, rivet gun, string lines, scriber, glass cutter (diamond tip), glass file set, glass holder, centre punch Equipment: pneumatic circular saw, band saw, aluminium profile cutting machine, mitering jig, deburring machine, work benches, drill press, bending machine, portable grinder Materials: aluminium profile materials (as required) 			
Learning Activities:	Activity	Resource	Student Guide Page	
	3.2	■ Information Sheet 3.2.1	38	
Assessment Criteria:	 Tools and equipment are gathered and checked for usability and working condition Materials are gathered and checked for quality and compliance to workplace specifications 			



Learning Outcome 3.3 – Fabricate Aluminium Structure for Windows

Contents:		ng of aluminium profile/materials			
		od of assembly of structure for windows			
		mbly of aluminium structure for windows			
Resources Required:		Workplace (cirrulated of detact)			
recounted requirem		onal protective equipment (PPE): hard hat (helr			
		, face shield, face mask, respirator, hand glove	s, apron (vest),		
		safety shoes, ear plugs, safety belt			
		s: measuring tape, steel rule, tri-square, mark			
		saw, wrenches, tin snip, drill bits, plastic hamm			
		spirit level, plumb bob, screwdrivers, sealant			
		lines, scriber, glass cutter (diamond tip), glas	s file set, glass		
		er, centre punch			
		oment: pneumatic circular saw, band saw, al			
		g machine, mitering jig, deburring machine, wor	k benches, drill		
		press, bending machine, portable grinder			
	iviate	Materials: aluminium profile materials (as required)			
Learning Activities:	Activity Resource		Student Guide Page		
	2.2	3.3 • Information Sheet 3.3.1 40			
	3.3	Self-Check Quiz 3.3.1	43		
		• Answer Key 3.3.1 49			
		, and the second	40		
	https://www.wikihow.com/Measure-Your- Windows				
Assessment Criteria:	Alum	inium profile/materials are measured in accord	ance with work		
Assessment Criteria:		drawing specifications			
	 Aluminium profile/materials are cut in accordance with work 				
	plan/drawing specifications				
	 Method of assembly of structure for windows is identified in 				
	accordance with workplace plan/drawing specifications				
	 Assembly of Aluminium structure for windows is performed in 				
	accordance with plans/drawings				



Learning Outcome 3.4 – Install Aluminium Windows and Glass

Contents:	 Typ 	all and fix aluminium window frame/structure e of glass and install glass into the aluminium windows			
Resources Required:	 Cut and install glass into the aluminium windows Workplace (simulated or actual) Personal protective equipment (PPE): hard hat (helmet), safety eye glass, face shield, face mask, respirator, hand gloves, apron (vest), safety shoes, ear plugs, safety belt Tools: measuring tape, steel rule, tri-square, marking pen/pencil, hacksaw, wrenches, tin snip, drill bits, plastic hammer, combination plier, spirit level, plumb bob, screwdrivers, sealant gun, rivet gun, string lines, scriber, glass cutter (diamond tip), glass file set, glass holder, centre punch Equipment: pneumatic circular saw, band saw, aluminium profile cutting machine, mitering jig, deburring machine, work benches, drill press, bending machine, portable grinder Materials: fabricated aluminium structure, window glass 				
Learning Activities:	Activity	Activity Resource Student Guide Page			
	3.4	 Information Sheet 3.4.1 Job Sheet 1 Self-Check Quiz 3.4.1 Answer Key 3.4.1 https://www.youtube.com/watch?v=t9Ty95hZo38 	44 46 47 49		
Assessment Criteria:	 Aluminium window frame/structure is installed on location in accordance with workplace requirement Aluminium window frame/structure is fixed on location in accordance with workplace requirements Type of glass and size to be installed is identified in accordance with work plan/drawing specification Glasses are cut to specified dimension in accordance with work plan/drawing specification Glasses are installed into the Aluminum window frame/structure safely and in accordance with workplace requirements 				



Learning Outcome 3.5 – Clean and Maintain Tools, Equipment and Work Area

Contents: Resources Required:	 Importance and necessity of cleaning tools, equipment and workplace Methods of cleaning, tools and equipment required for cleaning Storing of tools and equipment used Workplace (simulated or actual) Personal protective equipment (PPE): gloves, dust mask, safety shoes, hard hat, belt/body harness, goggles, working clothes, apron, ear plugs Tools and equipment: brooms, dusters, dust pans, cleaning brushes, mops, waste containers and cotton rags Materials: water, detergents, abrasives, bleaches 				
Learning Activities:	Activity	Resource	Student Guide Page		
	2.4	Information Sheet 2.4.1 https://en.wikipedia.org/wiki/Cleaning_agent https://www.hunker.com/12406192/how-to- store-tools-equipment	28		
Assessment Criteria:	WorkTools	Work area is cleaned in accordance with workplace requirements			

Module 4: Fabricate and install aluminium doors and glass

Module Descriptor:	This module covers the skills, knowledge and attitudes to fabricate and install aluminium doors with glass. It specifically includes identifying work requirements, preparing for work, fabricating aluminium structure for doors, installing aluminium doors and glass and cleaning and maintaining tools, equipment and work area.			
Nominal Duration:	56 hours			
Learning Outcomes:	4.1.	Identify work requirements		
	4.2.	Prepare for work		
	4.3.	Fabricate aluminium structure for doors		
	4.4.	Install aluminium doors and glass		
	4.5.	Clean and maintain tools, equipment and work area		
Performance Criteria:	4.1.	Dimensions of aluminium doors are identified in accordance with workplace plan/drawing and specifications.		
	4.2.	Types/classification of aluminium profile for door is identified in accordance with workplace plan/drawing and specifications.		
	4.3.	Shape of aluminium profile for door and glass works is determined.		
	4.4.	Work requirements are identified in accordance with workplace plan/drawing and specifications.		
	4.5.	4.5. Tools and equipment are gathered and checked for usability and working conditions.		
	4.6. Materials are gathered and checked for quality and compliance to workplace specifications.			
	4.7.	4.7. Aluminium profile/materials are measured in accordance with work plan/drawing specifications.		
	4.8.	4.8. Aluminium profile/materials are cut in accordance with work plan/drawing specifications.		
	4.9.	Method of assembly of structure for doors is identified in accordance with workplace plan/drawing specifications.		
	4.10.	Assembly of aluminium structure for doors is performed in accordance with plans/drawings.		
	4.11.	Aluminium door frame/structure is installed on location in accordance with workplace requirement.		
	4.12.	Aluminium door frame/structure is fixed on location in accordance with workplace requirements.		
	4.13.	Type of glass and size to be installed is identified in accordance with work plan/drawing specification.		
	4.14.	Glasses are cut to specified dimension in accordance with work plan/drawing specification.		
	4.15.	Glasses are installed into the aluminium door frame/structure safely and in accordance with workplace requirements.		
	4.16.	PPE, tools and equipment are cleaned and checked for usability.		

	4.17.	Work area is cleaned in accordance with workplace requirements.
	4.18.	Tools, equipment and PPE are stored in accordance with workplace policy.



Learning Outcome 4.1 – Identify Work Requirements

Contents:	 Types/classification of aluminium profile for door Shape of aluminium profile for door 					
Resources Required:	■ Alun	ninium profile materials for doors				
Learning Activities:	Activity	Activity Resource Student Guide Page				
	4.1	Information Sheet 4.1.1Self-Check Quiz 4.1.1Answer Key 4.1.1	52 53 63			
Assessment Criteria:	work Type acco					



Learning Outcome 4.2 – Prepare for Work

Contents:		ls and equipment ninium materials	
Resources Required:	 Word Persisted glassissafe Too hack plier linest cent Equipment cutting 	rkplace (simulated or actual) sonal protective equipment (PPE): hard hat (helmet) so, face shield, face mask, respirator, hand gloves, a sety shoes, ear plugs, safety belt ls: measuring tape, steel rule, tri-square, marking ksaw, wrenches, tin snip, drill bits, plastic hammer, r, spirit level, plumb bob, screwdrivers, sealant gun, rive so, scriber, glass cutter (diamond tip), glass file set, ge tre punch. ipment: pneumatic circular saw, band saw, alumi ing machine, mitering jig, deburring machine, work b so, bending machine, portable grinder erials: aluminium profile materials (as required)	pen/pencil, combination et gun, string glass holder, nium profile
Learning Activities:	Activity	Resource	Student Guide Page
	4.2	 Information Sheet 4.2.1 	54
Assessment Criteria:	worl Mat	Is and equipment are gathered and checked for uking conditions erials are gathered and checked for quality and cokplace specifications	•



Learning Outcome 4.3 – Fabricate Aluminium Structure for Doors

Contents:		g of aluminium profile/materials	
		d of assembly of structure for doors	
		nbly of aluminium structure for doors	
Resources Required:		place (simulated or actual)	
Trocom oco rroquirous		nal protective equipment (PPE): hard hat (helm	
		face shield, face mask, respirator, hand gloves	s, apron (vest),
	•	shoes, ear plugs, safety belt	
		measuring tape, steel rule, tri-square, mark	
		aw, wrenches, tin snip, drill bits, plastic hamme	
		spirit level, plumb bob, screwdrivers, sealant gun,	
		scriber, glass cutter (diamond tip), glass file se	t, glass holder,
		punch	411
		ment: pneumatic circular saw, band saw, aluminiu	
		ne, mitering jig, deburring machine, work bench	hes, drill press,
		ng machine, portable grinder	
	 Materi 	als: aluminium profile materials (as required)	
Learning Activities:	Activity	Resource	Student Guide
			Page
	4.3	■ Information Sheet 4.3.1	Page 56
	4.3	Information Sheet 4.3.1Self-Check Quiz 4.3.1	
	4.3		56
	4.3	Self-Check Quiz 4.3.1Answer Key 4.3.1	56 57
	4.3	 Self-Check Quiz 4.3.1 Answer Key 4.3.1 https://www.wikihow.com/Measure-Your- 	56 57
		 Self-Check Quiz 4.3.1 Answer Key 4.3.1 https://www.wikihow.com/Measure-Your-Windows 	56 57 63
Assessment Criteria:	■ Alumir	 Self-Check Quiz 4.3.1 Answer Key 4.3.1 https://www.wikihow.com/Measure-Your-Windows nium profile/materials are measured in accordance 	56 57 63
Assessment Criteria:	Alumir plan/d	 Self-Check Quiz 4.3.1 Answer Key 4.3.1 https://www.wikihow.com/Measure-Your-Windows nium profile/materials are measured in accordarawing specifications 	56 57 63 ance with work
Assessment Criteria:	Alumir plan/dAlumir	Self-Check Quiz 4.3.1 Answer Key 4.3.1 https://www.wikihow.com/Measure-Your-Windows nium profile/materials are measured in accordarawing specifications nium profile/materials are cut in accordance.	56 57 63 ance with work
Assessment Criteria:	Alumir plan/dAlumir plan/d	Self-Check Quiz 4.3.1 Answer Key 4.3.1 https://www.wikihow.com/Measure-Your-Windows nium profile/materials are measured in accordarawing specifications nium profile/materials are cut in accordance rawing specifications	56 57 63 ance with work
Assessment Criteria:	Alumir plan/dAlumir plan/dMetho	Self-Check Quiz 4.3.1 Answer Key 4.3.1 https://www.wikihow.com/Measure-Your-Windows nium profile/materials are measured in accordarawing specifications nium profile/materials are cut in accordance rawing specifications d of assembly of structure for doors is identified.	56 57 63 ance with work
Assessment Criteria:	 Alumir plan/d Alumir plan/d Metho with w 	Self-Check Quiz 4.3.1 Answer Key 4.3.1 https://www.wikihow.com/Measure-Your-Windows nium profile/materials are measured in accordarawing specifications nium profile/materials are cut in accordange rawing specifications d of assembly of structure for doors is identified orkplace plan/drawing specifications	56 57 63 ance with work ce with work
Assessment Criteria:	 Alumir plan/d Alumir plan/d Metho with w Assem 	Self-Check Quiz 4.3.1 Answer Key 4.3.1 https://www.wikihow.com/Measure-Your-Windows nium profile/materials are measured in accordarawing specifications nium profile/materials are cut in accordance rawing specifications d of assembly of structure for doors is identified.	56 57 63 ance with work ce with work



Learning Outcome 4.4 – Install Aluminium Doors and Glass

	■ Insta	all and fix aluminium door frame/structure	
Contents:		e of glass	
		and install glass into the aluminium doors	
		kplace (simulated or actual)	
Resources Required:		sonal protective equipment (PPE): hard hat (helmet), safe	ty ove aloce
		shield, face mask, respirator, hand gloves, apron (vest), s	
		olugs, safety belt	salety silves,
		s: measuring tape, steel rule, tri-square, marking pen/pen	cil hacksaw
		nches, tin snip, drill bits, plastic hammer, combination plie	
		nb bob, screwdrivers, sealant gun, rivet gun, string lines, s	
		er (diamond tip), glass file set, glass holder, centre punch	Joneson, glado
		ipment: pneumatic circular saw, band saw, aluminium p	rofile cuttina
		hine, mitering jig, deburring machine, work benches, drill pr	
		hine, portable grinder	,
		erials: fabricated aluminium structure for doors, door glass	
Learning Activities:		_	Student
Learning Activities.	Activity	Resource	Guide Page
			Guide i age
	4 4	■ Information Sheet 4.4.1	
	4.4	momation officer 4:4:1	58
	4.4	Job Sheet 2	58 60
	4.4	Job Sheet 2Self-Check Quiz 4.4.1	58
	4.4	Job Sheet 2Self-Check Quiz 4.4.1Answer Key 4.4.1	58 60 61
		 Job Sheet 2 Self-Check Quiz 4.4.1 Answer Key 4.4.1 https://www.youtube.com/watch?v=t9Ty95hZo38 	58 60 61 63
Assessment Criteria:	■ Alun	 Job Sheet 2 Self-Check Quiz 4.4.1 Answer Key 4.4.1 https://www.youtube.com/watch?v=t9Ty95hZo38 ninium door frame/structure is installed on location in accommodation.	58 60 61 63
Assessment Criteria:	■ Alun work	 Job Sheet 2 Self-Check Quiz 4.4.1 Answer Key 4.4.1 https://www.youtube.com/watch?v=t9Ty95hZo38 ninium door frame/structure is installed on location in acceptance requirement 	58 60 61 63 ordance with
Assessment Criteria:	Alun workAlun	 Job Sheet 2 Self-Check Quiz 4.4.1 Answer Key 4.4.1 https://www.youtube.com/watch?v=t9Ty95hZo38 ninium door frame/structure is installed on location in acceplace requirement ninium door frame/structure is fixed on location in acceplace. 	58 60 61 63 ordance with
Assessment Criteria:	Alun workAlun work	■ Job Sheet 2 ■ Self-Check Quiz 4.4.1 ■ Answer Key 4.4.1 https://www.youtube.com/watch?v=t9Ty95hZo38 ninium door frame/structure is installed on location in acceplace requirement ninium door frame/structure is fixed on location in acceplace requirements	58 60 61 63 ordance with
Assessment Criteria:	Alun workAlun workType	 Job Sheet 2 Self-Check Quiz 4.4.1 Answer Key 4.4.1 https://www.youtube.com/watch?v=t9Ty95hZo38 ninium door frame/structure is installed on location in acceplace requirement ninium door frame/structure is fixed on location in acceplace requirements of glass and size to be installed is identified in accordance 	58 60 61 63 ordance with
Assessment Criteria:	 Alun work Alun work Type plan 	 Job Sheet 2 Self-Check Quiz 4.4.1 Answer Key 4.4.1 https://www.youtube.com/watch?v=t9Ty95hZo38 ninium door frame/structure is installed on location in acceplace requirement ninium door frame/structure is fixed on location in acceplace requirements of glass and size to be installed is identified in accordane/drawing specification 	58 60 61 63 ordance with
Assessment Criteria:	 Alunwork Alunwork Type plan Glas 	■ Job Sheet 2 ■ Self-Check Quiz 4.4.1 ■ Answer Key 4.4.1 https://www.youtube.com/watch?v=t9Ty95hZo38 ninium door frame/structure is installed on location in acceplace requirement ninium door frame/structure is fixed on location in acceplace requirements are of glass and size to be installed is identified in accordant/drawing specification asses are cut to specified dimension in accordance	58 60 61 63 ordance with
Assessment Criteria:	 Alunwork Alunwork Type plan Glas plan 	■ Job Sheet 2 ■ Self-Check Quiz 4.4.1 ■ Answer Key 4.4.1 https://www.youtube.com/watch?v=t9Ty95hZo38 ninium door frame/structure is installed on location in acceplace requirement ninium door frame/structure is fixed on location in acceplace requirements of glass and size to be installed is identified in accordant/drawing specification in accordances are cut to specified dimension in accordances/drawing specification	58 60 61 63 ordance with ordance with ordance with
Assessment Criteria:	 Alunwork Alunwork Type plan Glas plan Glas 	■ Job Sheet 2 ■ Self-Check Quiz 4.4.1 ■ Answer Key 4.4.1 https://www.youtube.com/watch?v=t9Ty95hZo38 ninium door frame/structure is installed on location in acceplace requirement ninium door frame/structure is fixed on location in acceplace requirements are of glass and size to be installed is identified in accordant/drawing specification asses are cut to specified dimension in accordance	58 60 61 63 ordance with ordance with ordance with



Learning Outcome 4.5 – Clean and Maintain Tools, Equipment and Work Area

Contents: Resources Required:	 Method Storin Work Persod shoes ear p Tools mops 	rtance and necessity of cleaning tools, equipmen ods of cleaning, tools and equipment required for one of tools and equipment used cplace (simulated or actual) onal protective equipment (PPE): gloves, dusts, hard hat, belt/body harness, goggles, working lugs and equipment: brooms, dusters, dust pans, cless, waste containers and cotton rags rials: water, detergents, abrasives, bleaches	r cleaning transfer t
Learning Activities:	Activity	Resource	Student Guide Page
	2.4	 Information Sheet 2.4.1 https://en.wikipedia.org/wiki/Cleaning_agent https://www.hunker.com/12406192/how-to-store-tools-equipment 	28
Assessment Criteria:	Work	tools and equipment are cleaned and checked factorial area is cleaned in accordance with workplace respectively. The property of the control	equirements

Module 5: Fabricate and install aluminium partition and glass

Module Descriptor:	This module covers the skills, knowledge and attitudes to fabricate and install aluminium partition/wall with glass. It specifically includes identifying work requirements, preparing for work, fabricating aluminium structure for glass partition/wall, installing aluminium partition/wall and glass and cleaning and maintaining tools, equipment and work area.	
Nominal Duration:	56 hou	urs
Learning Outcomes:	5.1.	Identify work requirements
	5.2.	Prepare for work
	5.3.	Fabricate aluminium structure for glass partition/wall
	5.4.	Install aluminium partition/wall and glass
	5.5.	Clean and maintain tools, equipment and work area
Performance Criteria:	5.1.	Dimensions of aluminium partition/wall are identified in accordance with workplace plan/drawing and specifications.
	5.2.	Types/classification of aluminium profile for partition/wall is identified in accordance with workplace plan/drawing and specifications.
	5.3.	Shape of aluminium profile for partition/wall and glass works is determined.
	5.4.	Work requirements are identified in accordance with workplace plan/drawing and specifications.
	5.5.	Tools and equipment are gathered and checked for usability and working conditions.
	5.6.	Materials are gathered and checked for quality and compliance to workplace specifications.
	5.7.	Aluminium profile/materials are measured in accordance with work plan/drawing specifications.
	5.8.	Aluminium profile/materials are cut in accordance with work plan/drawing specifications.
	5.9.	Method of assembly of structure for partition/wall is identified in accordance with workplace plan/drawing specifications.
	5.10.	Assembly of aluminium structure for partition/wall is performed in accordance with plans/drawings.
	5.11.	Aluminium partition/wall frame/structure is installed on location in accordance with workplace requirement.
	5.12.	Aluminium partition/wall frame/structure is fixed on location in accordance with workplace requirements.
	5.13.	Type of glass and size to be installed is identified in accordance with work plan/drawing specification.
	5.14.	Glasses are cut to specified dimension in accordance with work plan/drawing specification.
	5.15.	Glasses are installed into the aluminium partition/wall frame/structure safely and in accordance with workplace requirements.

5.16.	PPE, tools and equipment are cleaned and checked for usability.
5.17.	Work area is cleaned in accordance with workplace requirements.
5.18.	Tools, equipment and PPE are stored in accordance with workplace policy.



Learning Outcome 5.1 – Identify Work Requirements

Contents:	Types/classification of aluminium profile for partition/wallShape of aluminium profile for partition/wall		
Resources Required:	■ Alun	 Aluminium profile materials for partition/wall 	
Learning Activities:	Activity	Resource	Student Guide Page
	5.1	Information Sheet 5.1.1Self-Check Quiz 5.1.1Answer Key 5.1.1	66 67 77
Assessment Criteria:	work Type acce Sha Wor	ensions of aluminium partition/wall are identified in acceptance plan/drawing and specifications es/classification of aluminium profile for partition/wall is ordance with workplace plan/drawing and specifications pe of aluminium profile for partition/wall and glass works it is requirements are identified in accordance with drawing and specifications	identified in s determined



Learning Outcome 5.2 - Prepare for Work

Contents: Resources Required:	 Alum Work Perso glass safety Tools hacks plier, string holde Equip cuttin press 	s and equipment required inium materials required for partition/wall cplace (simulated or actual) conal protective equipment (PPE): hard hat (helrow, face shield, face mask, respirator, hand glove by shoes, ear plugs, safety belt is: measuring tape, steel rule, tri-square, marks saw, wrenches, tin snip, drill bits, plastic hamm spirit level, plumb bob, screwdrivers, sealant glines, scriber, glass cutter (diamond tip), glaster, centre punch coment: pneumatic circular saw, band saw, alto g machine, mitering jig, deburring machine, works, bending machine, portable grinder rials: aluminium profile materials (as required)	es, apron (vest), king pen/pencil, er, combination gun, rivet gun, s file set, glass uminium profile
Learning Activities:	Activity	Resource	Student Guide Page
	5.2	■ Information Sheet 5.2.1	68
Assessment Criteria:	worki Mate	s and equipment are gathered and checked for ing conditions rials are gathered and checked for quality and place specifications	-



<u>Learning Outcome 5.3 – Fabricate Aluminium Structure for Glass Partition/Wall</u>

Contents:		ng of aluminium profile/materials	
		od of assembly of structure for partition/wall	
		mbly of aluminium structure for partition/wall	
Resources Required:		place (simulated or actual)	
110000110901109011		onal protective equipment (PPE): hard hat (heln	
		, face shield, face mask, respirator, hand glove	s, apron (vest),
		y shoes, ear plugs, safety belt	
		s: measuring tape, steel rule, tri-square, mark	
		saw, wrenches, tin snip, drill bits, plastic hamme	
		spirit level, plumb bob, screwdrivers, sealant	
		g lines, scriber, glass cutter (diamond tip), glass	s file set, glass
		er, centre punch	ıminium profile
		oment: pneumatic circular saw, band saw, alung machine, mitering jig, deburring machine, wor	
		s, bending machine, portable grinder	k beliches, unii
		rials: aluminium profile materials (as required)	
		(1
I a a martin at A a Charletta a			01
Learning Activities:	Activity	Resource	Student Guide Page
Learning Activities:			Page
Learning Activities:	Activity 5.3	■ Information Sheet 5.3.1	Page 70
Learning Activities:		Information Sheet 5.3.1Self-Check Quiz 5.3.1	Page 70 71
Learning Activities:		 Information Sheet 5.3.1 Self-Check Quiz 5.3.1 Answer Key 5.3.1 	Page 70
Learning Activities:		Information Sheet 5.3.1Self-Check Quiz 5.3.1	Page 70 71
Learning Activities:	5.3	 Information Sheet 5.3.1 Self-Check Quiz 5.3.1 Answer Key 5.3.1 https://www.wikihow.com/Measure-Your-Windows 	70 71 77
Learning Activities: Assessment Criteria:	5.3	 Information Sheet 5.3.1 Self-Check Quiz 5.3.1 Answer Key 5.3.1 https://www.wikihow.com/Measure-Your-Windows inium profile/materials are measured in accordance 	70 71 77
_	5.3 • Alum plan/o	 Information Sheet 5.3.1 Self-Check Quiz 5.3.1 Answer Key 5.3.1 https://www.wikihow.com/Measure-Your-Windows inium profile/materials are measured in accorded drawing specifications 	70 71 77 ance with work
_	5.3 Alum plan/a	 Information Sheet 5.3.1 Self-Check Quiz 5.3.1 Answer Key 5.3.1 https://www.wikihow.com/Measure-Your-Windows inium profile/materials are measured in accordarying specifications inium profile/materials are cut in accordance 	70 71 77 ance with work
_	5.3 Alum plan/o	 Information Sheet 5.3.1 Self-Check Quiz 5.3.1 Answer Key 5.3.1 https://www.wikihow.com/Measure-Your-Windows inium profile/materials are measured in accordarawing specifications inium profile/materials are cut in accordandrawing specifications 	Page 70 71 77 ance with work
	5.3 Alum plan/o	 Information Sheet 5.3.1 Self-Check Quiz 5.3.1 Answer Key 5.3.1 https://www.wikihow.com/Measure-Your-Windows inium profile/materials are measured in accordance drawing specifications inium profile/materials are cut in accordance drawing specifications od of assembly of structure for partition/wall 	Page 70 71 77 ance with work is identified in
_	5.3 Alum plan/d Alum plan/d Meth	 Information Sheet 5.3.1 Self-Check Quiz 5.3.1 Answer Key 5.3.1 https://www.wikihow.com/Measure-Your-Windows inium profile/materials are measured in accordance drawing specifications inium profile/materials are cut in accordance drawing specifications od of assembly of structure for partition/wall redance with workplace plan/drawing specification 	Page 70 71 77 ance with work is identified in
_	5.3 Alum plan/d Alum plan/d Methodaccol Asse	 Information Sheet 5.3.1 Self-Check Quiz 5.3.1 Answer Key 5.3.1 https://www.wikihow.com/Measure-Your-Windows inium profile/materials are measured in accordance drawing specifications inium profile/materials are cut in accordance drawing specifications od of assembly of structure for partition/wall 	Page 70 71 77 ance with work is identified in



Learning Outcome 5.4 – Install Aluminium Partition/Wall and Glass

Contents:		Il and fix aluminium partition/wall frame/structure	
		of glass	
		and install glass into the aluminium partition/wall	
Resources Required:		place (simulated or actual)	
resocurses required:		onal protective equipment (PPE): hard hat (helm	
	glass	, face shield, face mask, respirator, hand glove	s, apron (vest),
	safet	y shoes, ear plugs, safety belt	
	Tools	s: measuring tape, steel rule, tri-square, mark	ing pen/pencil,
	hack	saw, wrenches, tin snip, drill bits, plastic hamme	er, combination
	plier,	spirit level, plumb bob, screwdrivers, sealant	gun, rivet gun,
	string	lines, scriber, glass cutter (diamond tip), glass	s file set, glass
	holde	er, centre punch	
	Equip	oment: pneumatic circular saw, band saw, alu	uminium profile
	cuttin	ig machine, mitering jig, deburring machine, wor	k benches, drill
	press	s, bending machine, portable grinder	
	Mate	rials: fabricated aluminium structure for	partition/wall,
	partit	ion/wall glass	
Learning Activities:			Student Guide
Learning Activities.	Activity	Resource	Page
	5.4	Information Sheet 5.4.1	73
		Job Sheet 3	74
		Self-Check Quiz 5.4.1	75
		Answer Key 5.4.1	77
		https://www.youtube.com/watch?v=t9Ty95h	
		Zo38	
Assessment Criteria:		inium partition/wall frame/structure is installed	on location in
		rdance with workplace requirement	
		inium partition/wall frame/structure is fixed	on location in
		rdance with workplace requirements	
		of glass and size to be installed is identified in a	ccordance with
		plan/drawing specification	
	I ■ (∃lass	ses are cut to specified dimension in accorda	ance with work
	plan/	drawing specification	
	plan/ ■ Glass		frame/structure



Learning Outcome 5.5 – Clean and Maintain Tools, Equipment and Work Area

Contents:	Meth	rtance and necessity of cleaning tools, equipmen ods of cleaning, tools and equipment required fo ng of tools and equipment used	•
Resources Required:	Perso shoes ear pTools mops	place (simulated or actual) conal protective equipment (PPE): gloves, dust s, hard hat, belt/body harness, goggles, working lugs s and equipment: brooms, dusters, dust pans, clo s, waste containers and cotton rags rials: water, detergents, abrasives, bleaches	clothes, apron,
Learning Activities:	Activity	Resource	Student Guide Page
	2.4	 Information Sheet 2.4.1 https://en.wikipedia.org/wiki/Cleaning_agent https://www.hunker.com/12406192/how-to-store-tools-equipment 	28
Assessment Criteria:	Work	tools and equipment are cleaned and checked farea is cleaned in accordance with workplace rest, equipment and PPE are stored in accordance	equirements

Module 6: Fabricate and install aluminium false ceiling

Module Descriptor:	This module covers the skills, knowledge and attitudes to fabricate and install aluminium false ceiling. It specifically includes identifying work requirements, preparing for work, fabricating aluminium structure for false ceiling, installing aluminium false ceiling and board and cleaning and maintaining tools, equipment and work area.	
Nominal Duration:	48 hou	urs
Learning Outcomes:	6.1.	Identify work requirements
	6.2.	Prepare for work
	6.3.	Fabricate aluminium structure for false ceiling
	6.4.	Install aluminium structure false ceiling and board
	6.5.	Clean and maintain tools, equipment and work area
Performance Criteria:	6.1.	Dimensions of aluminium false ceiling are identified in accordance with workplace plan/drawing and specifications.
	6.2.	Types/classification of aluminium profile for false ceiling is identified in accordance with workplace plan/drawing and specifications.
	6.3.	Shape of aluminium profile for false ceiling and board works is determined.
	6.4.	Work requirements are identified in accordance with workplace plan/drawing and specifications.
	6.5.	Tools and equipment are gathered and checked for usability and working conditions.
	6.6.	Materials are gathered and checked for quality and compliance to workplace specifications.
	6.7.	Aluminium profile/materials are measured in accordance with work plan/drawing specifications.
	6.8.	Aluminium profile/materials are cut in accordance with work plan/drawing specifications.
	6.9.	Method of assembly of structure for false ceiling is identified in accordance with workplace plan/drawing specifications.
	6.10.	Assembly of aluminium structure for false ceiling is performed in accordance with plans/drawings.
	6.11.	Aluminium frame/structure of false ceiling is installed on location in accordance with workplace requirement.
	6.12.	Aluminium frame/structure of false ceiling is fixed on location in accordance with workplace requirements.
	6.13.	Type of ceiling board and size to be installed is identified in accordance with work plan/drawing specification.
	6.14.	Ceiling boards are cut to specified dimension in accordance with work plan/drawing specification.
	6.15.	Ceiling boards are installed into the aluminium false ceiling frame/structure safely and in accordance with workplace requirements.

6.16.	PPE, tools and equipment are cleaned and checked for usability.	
6.17.	Work area is cleaned in accordance with workplace requirements.	
6.18.	Tools, equipment and PPE are stored in accordance with workplace policy.	



Learning Outcome 6.1 – Identify Work Requirements

Contents: Resources Required:	 Types/classification of aluminium profile for false ceiling Shape of aluminium profile for false ceiling Aluminium profile materials for false ceiling 		
Learning Activities:	Activity	Resource	Student Guide Page
	6.1	Information Sheet 6.1.1Self-Check Quiz 6.1.1Answer Key 6.1.1	80 82 92
Assessment Criteria:	 Dimensions of aluminium false ceiling are identified in accordance with workplace plan/drawing and specifications Types/classification of aluminium profile for false ceiling is identified in accordance with workplace plan/drawing and specifications Shape of aluminium profile for false ceiling and board works is determined Work requirements are identified in accordance with workplace plan/drawing and specifications 		



Learning Outcome 6.2 - Prepare for Work

Contents:		ls and equipment required for false ceiling ninium materials required for false ceiling	
Resources Required:	 Pers glas safe Tool hack spiri scrik Equ mac beno glas 	kplace (simulated or actual) sonal protective equipment (PPE): hard hat (helmet), s, face shield, face mask, respirator, hand gloves, a ty shoes, ear plugs, safety belt ls: measuring tape, steel rule, tri-square, marking ksaw, wrenches, tin snip, drill bits, plastic hammer, comb t level, plumb bob, screwdrivers, sealant gun, rivet gun, per, centre punch ipment: pneumatic circular saw, band saw, aluminium p thine, mitering jig, deburring machine, work benches, ding machine, portable grinder erials: aluminium profile materials (as required)	pron (vest), pen/pencil, ination plier, string lines, rofile cutting
Learning Activities:	Activity	Resource	Student Guide Page
	6.2	 Information Sheet 6.2.1 	83
Assessment Criteria:	 Tools and equipment are gathered and checked for usability and working conditions Materials are gathered and checked for quality and compliance to workplace specifications 		



<u>Learning Outcome 6.3 – Fabricate Aluminium Structure for False Ceiling</u>

Contents: Resources Required:	 Cutting of aluminium profile/materials Method of assembly of structure for false ceiling Assembly of aluminium structure for false ceiling Personal protective equipment (PPE): hard hat (helmet), safety eye glass, face shield, face mask, respirator, hand gloves, apron (vest), safety shoes, ear plugs, safety belt Tools: measuring tape, steel rule, tri-square, marking pen/pencil, hacksaw, wrenches, tin snip, drill bits, plastic hammer, combination plier, spirit level, plumb bob, screwdrivers, sealant gun, rivet gun, string lines, scriber, centre punch Equipment: pneumatic circular saw, band saw, aluminium profile cutting machine, mitering jig, deburring machine, work benches, drill press, bending machine, portable grinder Materials: aluminium profile materials (as required) 		
Learning Activities:	Activity	Resource	Student Guide Page
	6.3	 Information Sheet 6.3.1 Self-Check Quiz 6.3.1 Answer Key 6.3.1 https://www.indiamart.com > > Abhi Fabrication 	85 86 92
Assessment Criteria:	 Aluminium profile/materials are measured in accordance with work plan/drawing specifications Aluminium profile/materials are cut in accordance with work plan/drawing specifications Method of assembly of structure for false ceiling is identified in accordance with workplace plan/drawing specifications Assembly of aluminium structure for false ceiling is performed in accordance with plans/drawings 		



<u>Learning Outcome 6.4 – Install Aluminium False Ceiling and Board</u>

Contents:	 Install and fix aluminium false ceiling frame/structure 			
		of ceiling board		
		and install glass into the aluminium false ceiling		
Resources Required:	Personal protective equipment (PPE): hard hat (helmet), safety eye glass,			
·	face shield, face mask, respirator, hand gloves, apron (vest), safety shoes,			
	ear plugs, safety belt			
	 Tools: measuring tape, steel rule, tri-square, marking pen/pencil, hacksaw, wrenches, tin snip, drill bits, plastic hammer, combination plier, spirit level, 			
	plumb bob, screwdrivers, sealant gun, rivet gun, string lines, scriber, centre			
	punch			
	 Equipment: pneumatic circular saw, band saw, aluminium profile cutting 			
	machine, mitering jig, deburring machine, work benches, drill press,			
	bending machine, portable grinder			
	Mate	rials: fabricated aluminium structure for false ceiling,	ceiling boards	
Learning Activities:	A - the day	B	Student Guide	
3	Activity	Resource	Page	
	6.4	 Information Sheet 6.4.1 	88	
	0	Job Sheet 4	89	
		Self-Check Quiz 6.4.1	90	
		Answer Key 6.4.1	92	
		https://www.youtube.com/watch?v=t9Ty95hZo38		
Assessment Criteria:	Alum	inium false ceiling frame/structure is installed	on location in	
Assessment Criteria.		dance with workplace requirement		
		inium false ceiling frame/structure is fixed on location	n in accordance	
		workplace requirements		
	Type of board and size to be installed is identified in accordance with work			
	plan/drawing specification			
		ng boards are cut to specified dimension in accord drawing specification	ance with work	
	Pian/o	• .	n partition/wall	
		e/structure safely and in accordance with workplace r		
		, c	5 4 5 5 111 5111 6	



Learning Outcome 6.5 – Clean and Maintain Tools, Equipment and Work Area

Contents: Resources Required:	 Importance and necessity of cleaning tools, equipment and workplace Methods of cleaning, tools and equipment required for cleaning Storing of tools and equipment used Workplace (simulated or actual) Personal protective equipment (PPE): gloves, dust mask, safety shoes, hard hat, belt/body harness, goggles, working clothes, apron, ear plugs Tools and equipment: brooms, dusters, dust pans, cleaning brushes, mops, waste containers and cotton rags Materials: water, detergents, abrasives, bleaches 		
Learning Activities:	Activity	Resource	Student Guide Page
	2.4	Information Sheet 2.4.1 https://en.wikipedia.org/wiki/Cleaning_agent https://www.hunker.com/12406192/how-to- store-tools-equipment	28
Assessment Criteria:	 PPE, tools and equipment are cleaned and checked for usability Work area is cleaned in accordance with workplace requirements Tools, equipment and PPE are stored in accordance with workplace policy 		