COMPETENCY STANDARDS & ASSESSMENT GUIDE
FOR
TILE AND MARBLE WORKS

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

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The Competency Standards for Tile and Marble Works is a document for the development of curricula, teaching and learning materials, and assessment tools. It also serves as the document for providing trainings consistent with the requirement of industry in order for individuals who passed through the set standard via assessment would be qualified and settled for a relevant job.

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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 or at 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 14th of February 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. Nibir Kanti Sarker	Project Builders Ltd(PBL)	Head, Machinery Division
Mr. Faysoluzzaman	Diligent Engineers	Project Engineer
Md. Samin Yasar	Building Design & Consultant	Site Engineer
Md. Monirul Islam	National Development Engineers	Project Engineer
Md. Jalal Mia	Atlanta group of industries	Manager
Engr. Dilip Kumar Sarker	Project Builders Ltd(PBL)	Deputy Chief engineer
Md. Mohiuddin Ahmed	Samsuddin Mia & Associates Ltd.	Sr. Site Engineer
Md. Amanulla	Engineer foundation &Consultant	Sr. Engineer
Md. Khairuzzaman Mia	Asset development and holding Ltd.	Sr. Project Engineer
Md. Majed Ali	Asset Development & holding	Sr. Project Engineer

Workshop Facilitators:

Md. Mohiuzzaman	SEIP	Course Specialist
Emeterio Cedillo, Jr.	SEIP	International Specialist
Md. Nuruzzaman	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/CHART for
Tile and Marble Works

UNITS OF COMPETENCY	ELEMENTS

A. Generic (Basic) Competencies

Units of Competency	Elements			
PERFORM COMPUTATIONS USING BASIC MATHEMATICAL CONCEPTS (SEIP-CON-TIL-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-TIL-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-TIL-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-TIL-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

Units of Competency	Elements			
TRANSLATE DRAWINGS, PLANS AND SPECIFICATIONS (SEIP-CON-TIL-1-S)	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-TIL-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-TIL-2-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 (Course) Competencies

Units of Competency	Elements		
PERFORM TILE AND MARBLE LAYING PREPARATION WORK (SEIP-CON-TIL-1-O)	Plan and prepare for tile and marble work laying	Prepare materials for tile and marble laying	Prepare subfloor/ substrate surface

INSTALL TILES ON FLOORS (SEIP-CON-TIL-2-O)	Plan and prepare for tile installation on floors	Cut tiles as required	Lay floor tiles	Grout floor tile joints
	Clean/maintain work area			
INSTALL TILES ON WALLS (SEIP-CON-TIL-3-O)	Plan and prepare for tile installation on wall	Cut tiles as required	Lay tiles on wall	Grout wall tile joints
	Clean/maintain work area			
PERFORM MARBLE INSTALLATION ON FLOORS (SEIP-CON-TIL-4-O)	Plan and prepare for marble installation on floors	Cut marble slabs as required	Lay marble slabs on floor	Grout marble slab joints
	Clean/maintain work area			
PERFORM RUSTIC STONE WORKS (SEIP-CON-TIL-5-O)	Plan and prepare for rustic stone panel installation on walls	Apply mortar material on wall	Lay rustic stone panels/veneers on wall	Apply grout on spaces of rustic stone panels
	Clean/maintain the work area			
PERFORM TILE AND MARBLE REPAIR WORKS (SEIP-CON-TIL-6-O)	Plan and prepare for tile and marble repair works	Repair damaged tile work	Repair damaged marble work	Clean/maintain work area

Units & Elements at Glance:
A.   Generic (Basic) Competencies (46 hrs.)

Code	Unit of Competency	Elements of Competency	Duration (Hours)
SEIP-CON-TIL-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-TIL-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-TIL-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-TIL-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 (36 hrs.)

Code	Unit of Competency	Elements of Competency	Duration (Hours)
SEIP-CON-TIL-1-S	Translate Drawings, Plans and Specifications	1. Access information from manuals, designs and plans 2. Interpret drawings and specifications from manuals, designs and plans 3. Store manuals, designs and plans	16

SEIP-CON-TIL-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-TIL-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	10
Total Hours			**36**

C.   Occupation Specific (Core) Competencies (278 hrs.)

Code	Unit of Competency	Elements of Competency	Guided Learning Hours
SEIP-CON-TIL-1-O	Perform Tile and Marble Laying Preparation Works	1. Plan and prepare for tile and marble work laying 2. Prepare materials for tile and marble laying 3. Prepare subfloor/substrate surface	24
SEIP-CON-TIL-2-O	Install Tiles on Floors	1. Plan and prepare for tile installation on floors 2. Cut tiles as required 3. Lay floor tiles 4. Grout floor tile joints 5. Clean/maintain work area	56
SEIP-CON-TIL-3-O	Install Tiles on Walls	1. Plan and prepare for tile installation on wall 2. Cut tiles as required 3. Lay tiles on wall 4. Grout wall tile joints 5. Clean/maintain work area	56
SEIP-CON-TIL-4-O	Perform Marble Installation on Floors	1. Plan and prepare for marble installation on floors 2. Cut marble slabs as required 3. Lay marble slabs on floor 4. Grout marble slab joints 5. Clean/maintain work area	60

SEIP-CON-TIL-5-O	Perform Rustic Stone Works	1. Plan and prepare for rustic stone panel installation on walls 2. Apply mortar material on wall 3. Lay rustic stone panels/veneers on wall 4. Apply grout on spaces of rustic stone panels 5. Clean/maintain work area	48
SEIP-CON-TIL-6-O	Perform Tile and Marble Repair Works	1. Plan and prepare for tile and marble repair works 2. Repair damaged tile work 3. Repair damaged marble work 4. Clean/maintain work area	34
Total Hours			**278**

COMPETENCY STANDARD: TILE AND MARBLE WORKS

A. The Generic (Basic Competencies)

Unit of Competency: **PERFORM COMPUTATIONS USING BASIC MATHEMATICAL CONCEPTS**	Nominal Duration: 14 hrs.	Unit Code: SEIP-CON-TIL-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 percentage.
	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-TIL-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 Light Engineering 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 aid 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 aid 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-TIL-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 Workplace documents.
	1.2 Visual information.
	1.3 preparing/developing of simple **routine workplace documents** using key words, phrases, simple sentences.
	1.4 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 Converse 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 questions.
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:	Nominal Duration:	Unit Code:
OPERATE IN A SELF-DIRECTED TEAM	8 hrs.	SEIP-CON-TIL-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 identified.
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 OHS information
	1.9 Sign

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 Effectively 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 questions
	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: **TRANSLATE DRAWINGS, PLANS AND SPECIFICATIONS**	Nominal Duration: 16 hrs.	Unit Code: SEIP-CON-TIL-1-S
Unit Descriptor: This unit covers the knowledge, skills and attitudes required for a worker to translate drawings, plans and specifications. It specifically includes the tasks of 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:
(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. Access information from manuals, designs and plans	1.1 Appropriate **manuals** are identified and accessed. 1.2 Version and date of the manual are checked to ensure up-to-date specifications of tools, equipment, materials and procedures.
2. Interpret drawings and specifications from manuals, designs and plans	2.1 Relevant **drawings** and **specifications** are correctly recognized from manuals, designs and plans. 2.2 Terms and abbreviations are recognized. 2.3 **Signs and symbols** are interpreted.
3. Store manuals, designs and plans	3.1 Manuals, designs and plans are collected and packed. 3.2 Manuals, designs and plans are stored to prevent damage, and ready access and updating of information when required.

Range of Variables

Variable	Range May include but not limited to:
1. Manuals	1.1 Manufacturer's Specification Manual 1.2 Repair Manual 1.3 Maintenance Procedure Manual 1.4 Periodic Maintenance Manual 1.5 Quality Manual 1.6 Instruction Manual
2. Drawings	2.1 Technical drawings 2.2 Sketches
3. Specifications	3.1 Product specifications 3.2 Performance specifications 3.3 Method specifications
4. Signs and symbols	4.1 Refers to all signs and symbols associated in the construction sector

Curricular Content Guide

1. Underpinning Knowledge	1.1 Types of construction manuals
	1.2 Identification of signs and symbols
	1.3 Identification of units of measurement
	1.4 Identification of conversion units
	1.5 Drawings and specifications
	1.6 Terms and abbreviations
2. Underpinning Skills	2.1 Checking version and date of the manual to ensure up-to-date specifications of tools, equipment, materials and procedures
	2.2 Identifying relevant drawings and specifications correctly
	2.3 Identifying terms and abbreviations
	2.4 Identifying signs and symbols
	2.5 Interpreting drawings and specifications
	2.6 Interpreting schedules, dimensions and specifications contained in the drawings
	2.7 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 Checked version and date of the manual to ensure up-to-date specifications of tools, equipment, materials and procedures.
	1.2 Identified relevant drawings and specifications correctly.
	1.3 Identified terms and abbreviations.
	1.4 identified Signs and symbols.
	1.5 Interpreted drawings and specifications.
	1.6 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 Interview
	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-TIL-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 operation of hand tools is applied. 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 are 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 1.18 Pliers 1.2 Auger bits 1.19 Plumb bob 1.3 Bars (crow and pitch) 1.20 Punches 1.4 Bench vise 1.21 Rip saw 1.5 Bolt cutters 1.22 Scrapers 1.6 C-clamp 1.23 Screwdrivers 1.7 Chisels 1.24 Sealant Gun 3

	1.8 Crosscut saws	1.25 Shovel/Spades
	1.9 Drill bits	1.26 Sledge Hammers
	1.10 Files of all cross-sectional shapes and types	1.27 Spanners and Wrenches
	1.11 Gouges	1.28 Spatula/Putty Knives
	1.12 Hacksaw	1.29 String Lines
	1.13 Hammer	1.30 Trowels and Floats
	1.14 Hand drill	1.31 Vice grip
	1.15 Measuring Tapes	1.32 Wire Cutters
	1.16 Tile cutter	1.33 Wood Planners
	1.17 Marble/stone cutter	1.34 Picks/Mattocks
		1.35 Paint Brushes/Rollers
2. Power tools	2.1 Power drills	2.8 Threading machine
	2.2 Nail guns	2.9 Sanders machine
	2.3 Angle grinders	2.10 Planers
	2.4 Pneumatic wrenches	2.11 Routers
	2.5 Grinders	2.12 Pedestal drills
	2.6 Nibblers	2.13 Grinders
	2.7 Jack hammer	
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 OHS 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	

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: 10 hrs.	Unit Code: SEIP-CON-TIL-3-S

Unit Descriptor:
This unit covers the knowledge, skills and attitudes required for a worker 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:
(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. 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 Measurements are obtained using appropriate measuring device. 2.2 **Systems of measurements** are identified and converted where necessary. 2.3 Results are confirmed and recorded.
3. Execute simple construction work calculations	3.1 Simple calculations involving **four basic mathematical operations** are executed. 3.2 Other operations are used to complete tasks in construction works. 3.3 Appropriate formulas for calculating quantities of materials are selected. 3.4 Calculations are performed and verified. 3.5 Material quantities are calculated. 4.6 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
	May include but not limited to:
1. Measuring device	1.1 Slide calipers 1.2 Steel tape measure 1.3 Steel rule 1.4 Carpenter's square 1.5 Tri-square

	1.6 Feeler gauges
	1.7 Water level
	1.8 Hose level
	1.9 Thermometers
	1.10 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 Types and principles of operation of measuring devices
	1.2 The ISO standard of measurements
	1.3 Methods of measurement and calculation
	1.4 Fraction and decimals
	1.5 Linear measurement
	1.6 Units of conversion and conversion factors in measurements
	1.7 Dimensioning and fits and tolerances
	1.8 Calculating ratio and proportion
	1.9 Care in the use of measuring devices
2. Underpinning Skills	2.1 Selecting appropriate measuring device for the job
	2.2 Checking and verifying usability of measuring device
	2.3 Obtaining measurements using appropriate measuring device.
	2.4 Confirming measurements and recording results
	2.5 Carrying out simple calculations involving four basic mathematical operations
	2.6 Calculating material quantities
	2.7 Interpreting and communicating results to authority
	2.8 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
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. Occupation Specific (Core) Competencies

Unit of Competency: **PERFORM TILE AND MARBLE LAYING PREPARATION WORKS**	Nominal Duration: 24 hrs.	Unit Code: SEIP-CON-TIL-1-O
Unit Descriptor: This unit covers the knowledge, skills and attitudes required for a worker to perform tile and marble laying preparation works in construction sector. It specifically includes the tasks of planning and preparing for tile and marble work, preparing materials for tile and marble setting application and preparing subfloor/substrate surface.		

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. Plan and prepare for tile and marble work laying	1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied. 1.2 **Safety requirements** are followed in accordance with OHS and workplace requirements. 1.3 Signage and barricade requirements are identified and implemented. 1.4 **Tools and equipment** to carry out tasks are gathered and checked for serviceability and any faults are rectified or reported prior to start of work. 1.5 **Material** requirements are identified and gathered in accordance with plans and/or specifications. 1.6 Environmental protection requirements are identified and observed following National and International OHS regulations.
2. Prepare materials for tile and marble laying	2.1 Floor and wall tile materials are checked for product suitability, conformity to specification and compatibility with surface material, preparation and installation technique. 2.2 Marble installation materials are checked for product suitability, conformity to specification and compatibility with surface material, preparation and installation technique. 2.3 Activities for **material preparation** are identified from manufacturers' or workplace instructions/specifications. 2.4 Material preparation is carried out to satisfy the requirements of the application process. 2.5 Tile and marble installation **design pattern** is identified in accordance to workplace/design requirements.
3. Prepare subfloor/substrate surface	3.1 **Surface mounted structures** and attachments are safely detached, removed or arranged for removal from area and stored. 3.2 **Subfloor structure** is identified and surfaces are cleaned to remove all **contaminants/foreign materials** and loose material in accordance with supervisor's instructions.

	3.3 **Underlay materials**, if specified, are proportioned and mixed to instructions ready for application.
	3.4 Subfloor is scratched, cleaned, cured and dried to instructions in accordance with tile application specifications.
	3.5 Underlay materials are laid on the subfloor in accordance with workplace and construction plan/design.

Range of Variables

Variable	Range
	May include but not limited to:
1. Safety requirements	1.1 Wearing of PPEs
	1.2 Installing safety barrier lines/guards
	1.3 Proper lighting
	1.4 Using dust collector
2. Tools and equipment	2.1 Tools
	2.1.1 Tile cutter (Manual)
	2.1.2 Mechanical pliers
	2.1.3 Adjustable wrench
	2.1.4 Screw drivers
	2.1.5 Spatula
	2.1.6 Notched trowel
	2.1.7 Level
	2.1.8 Tape measure
	2.1.9 Grout float
	2.1.10 Wet saw
	2.1.11 Tile spacers
	2.1.12 Caulking guns
	2.1.13 Hammers (plastic faced /rubber faced
	2.1.14 Mallet (plastic, rubber)
	2.1.15 Grouting tool
	2.2 Equipment
	2.2.1 Portable drill
	2.2.2 Portable grinder
	2.2.3 Levelling equipment
	2.2.4
3. Materials	3.1 Grout
	3.2 Thinset (Pre-mix adhesives)
	3.3 Tile underlayment
	3.4 Grout release agent
	3.5 Tile and grout sealer
	3.6 Tiles
	3.7 Marbles
	3.8 Sponge
	3.9 Chalk line
	3.10 Sand
	3.11 Mortar
4. Material preparation	4.1 Checking for tile/marble damage, cracks and quality

	4.2 Measuring
	4.3 Cutting
	4.4 Grinding
	4.5 Fitting up
	4.6 Washing
	4.7 Shaping
5. Design pattern	5.1 Straight standard set
	5.2 Standard brick
	5.3 Picture frame
	5.4 Standard diagonal
	5.5 1-clip pattern
	5.6 4-clip pattern
	5.7 Diagonal picture frame
	5.8 Diagonal brick with mosaic
	5.9 Diagonal offset dot
	5.10 Rug pattern
	5.11 Herringbone
6. Surface mounted structures	6.1 Scaffolding
	6.2 Material stockpiles
	6.3 Construction tool, machines, equipment
	6.4 Ladders
	6.5 Picture frames
	6.6 Wall dressings
	6.7 Cabinets
	6.8 Tables
	6.9 Chairs
7. Subfloor structure	7.1 Laminated flooring
	7.2 Concrete/cement boards
	7.3 Tiled flooring
	7.4 Concrete slab
	7.5 Mortar base
	7.6 Plywood
8. Contaminants/foreign materials	8.1 Sand
	8.2 Rubbish/garbage materials
	8.3 Broken tiles
	8.4 Water/moisture
	8.5 Scattered spilled cement mortars
9. Underlay materials	8.6 Sand screed
	8.7 Cement screed
	8.8 Plywood
	8.9 Mortar
	8.10 Levelling compounds
	8.11 Pre mixed adhesives (thinset)

Curricular Content Guide

1. Underpinning Knowledge	1.1 Types of tools and equipment used in tile and marble setting application
	1.2 Means of checking serviceability of tools and equipment
	1.3 Operation and maintenance instruction on the use of tools and equipment
	1.4 Methods of Identifying material requirements and gathering
	1.5 Checking procedure of tile and marble materials
	1.6 Material preparation procedures
	1.7 Types of tile and marble installation design pattern
	1.8 Types of subfloor structure and methods of cleaning for each type
	1.9 Types of underlay materials and their methods of preparation and application
	1.10 Ways of cleaning and preparing subfloor prior to tile and marble installation
2. Underpinning Skills	2.1 Gathering of tools and equipment and checking for serviceability.
	2.2 Rectifying faults found on tools and equipment and reporting to superiors.
	2.3 Identifying material requirements and gathering
	2.4 Checking tile and marble materials for product suitability, conformity and compatibility with installation requirements
	2.5 Carrying out material preparation to satisfy the requirements of the application process
	2.6 Identifying tile and marble installation design pattern
	2.7 Identifying subfloor structure and cleaning of surfaces to remove all contaminants/foreign materials and loose material
	2.8 Proportioning underlay materials and mixing as per instructions
	2.9 Scratching, cleaning, curing and drying subfloor
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
4. Resource Implications	4.1 Workplace (simulated or actual)
	4.2 Tiles and marble installation tools and equipment
	4.3 Materials needed for tile and marble laying
	4.4 Pens
	4.5 Papers
	4.6 Work books
	4.7 Tile laying manual

Assessment Evidence Guide

1. Critical Aspects of Competency	Assessment required evidence that the candidate:
	1.1 Gathered tools and equipment and checked for serviceability.
	1.2 Rectified or reported faults prior to start of work.
	1.3 Identified material requirements and gathered in accordance with plans and/or specifications.
	1.4 Checked tile and marble materials for product suitability, conformity and compatibility with installation requirements.
	1.5 Carried out material preparation procedures.
	1.6 Identified tile and marble installation design pattern in accordance to workplace/design requirements.
	1.7 Identified subfloor structure and cleaned surfaces to remove all contaminants/foreign materials and loose material.
	1.8 Laid underlay materials on the subfloor in accordance with workplace and construction plan/design.
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: **INSTALL TILES ON FLOORS**	Nominal Duration: 56 hrs.	Unit Code: SEIP-CON-TIL-2-O

Unit Descriptor:
This unit covers the knowledge, skills and attitudes required for a worker to install tiles and marble on floors in construction. It specifically includes the tasks of planning and preparing tile and marble installation, cutting tiles/marble as required, laying floor tiles/marble, grouting floor tile and marble joints, cleaning/maintaining work area.

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. Plan and prepare for tile installation on floors	1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied. 1.2 **Safety and environmental requirements** are followed in accordance with workplace and OHS policies. 1.3 Signage/barricade requirements are identified and implemented. 1.4 **Tools and equipment** are gathered and checked for serviceability and any faults are rectified or reported prior to start of work. 1.5 **Materials** appropriate to the work application are identified, and prepared at work site. 1.6 Tiles are checked in accordance with workplace plan and specifications. 1.7 Tile grid patterns and lay out design are determined and set out in accordance with workplace specifications and requirements.
2. Cut tiles as required	2.1 Tiles are cut without jagged, rough edges, breaks or damage on tile surfaces. 2.2 Recess hole or curve is cut by hand or machine in accordance with specified shape and size. 2.3 Tile edges are grounded to form a miter at the joint in accordance with workplace procedures and manufacturers' recommendations.
3. Lay floor tiles	3.1 Subfloor is re-checked to ensure surface preparations are in order and leveled. 3.2 Tiles are positioned on the identified grid in accordance with specified pattern for sampling purposes. 3.3 **Bonding material**/adhesive is applied on the floor surface using a notched trowel. 3.4 Tiles are laid on the floor grid with minimum voids and maintain fully bedded alignment to specifications. 3.5 Position the tiles in place using required spacers. 3.6 Tile level and perpendicularity is regularly checked to be within specified measurements and tolerance.

	3.7 Curved bead angle tile trim are fixed in accordance with specified measurements and shapes.
	3.8 Partial tiles are set out and cut using appropriate cutting tool/equipment.
	3.9 Corners are kept square within specified tolerance and finish in accordance with specifications.
4. Grout floor tile joints	4.1 All joints are cleaned and prepared to receive grout according to manufacturers' specifications.
	4.2 Grout is mixed and applied in accordance with workplace and manufacturers' specifications/requirements.
	4.3 Excess grout/adhesives are removed between tile/marble.
	4.4 Surfaces of tiles are cleaned and polished with cloth/sponge removing all dust and dirt from surface and joints.
	4.5 Tiles are left undisturbed for curing within the specified time in accordance with workplace requirements and specification.
5. Clean/maintain work area	5.1 Work area is cleared and materials disposed of, reused or recycled in accordance with workplace requirements.
	5.2 Tools and equipment are cleaned, checked, maintained and stored in accordance with workplace /manufacturer's requirements.

Range of Variables

Variable	Range
	May include but not limited to:
1. Safety and environmental requirements	1.1 Wearing of PPEs
	1.2 Installing safety barrier lines/guards
	1.3 Proper lighting
	1.4 Using dust collector
	1.5 Proper disposal of garbage and excess materials
	1.6 Availability of first aid kit
	1.7 Guarding rotating parts of power tools
2. Tools and equipment	2.1 Tools
	2.1 Tile cutter (Manual)
	2.2 Mechanical pliers
	2.3 Adjustable wrench
	2.4 Screw drivers
	2.5 Spatula
	2.6 Notched trowel
	2.7 Level
	2.8 Tape measure
	2.9 Grout float
	2.10 Wet saw
	2.11 Tile spacers
	2.12 Caulking guns
	2.13 Hammers (plastic faced /rubber faced
	2.14 Mallet (plastic, rubber)
	2.15 Grouting tool

	2.2 Equipment
	2.2.1 Portable drill
	2.2.2 Portable grinder
	2.2.3 Levelling equipment
	2.2.4 Tile cutting machine
3. Materials	3.1 Cement
	3.2 Sand
	3.3 Thinset
	3.4 Tile underlayment
	3.5 Grout release agent
	3.6 Tile and grout sealer
	3.7 Tiles
	3.8 Sponge
	3.9 Chalk/marker
4. Bonding material	4.1 Grout
	4.2 Tile adhesive
	4.3 Mortar
	4.4 Thin set

Curricular Content Guide

1. Underpinning Knowledge	1.1 Kinds of tiles and their characteristics
	1.2 Properties of different kinds of tiles
	1.3 Types of tools and equipment use for cutting tiles and their application
	1.4 Techniques for cutting of tiles
	1.5 Procedure of tile cutting and edging
	1.6 Mitering techniques on tiles
	1.7 Types of tile bonding materials and their application
	1.8 Application procedure and techniques of bonding materials/adhesive
	1.9 Method of aligning and levelling of tiles
	1.10 Types and use of spacers in aligning of tiles and marbles
	1.11 Techniques of checking level and perpendicularity of tiles and grout mixing procedure
	1.12 Surface cleaning and polishing of tiles
2. Underpinning Skills	2.1 Cutting tiles
	2.2 Edging tile jolly to form miters
	2.3 Applying bonding material/adhesive on the floor surface
	2.4 Laying tiles on the floor grid with minimum voids and maintain fully bedded alignment to specifications
	2.5 Positioning the tiles in place using required spacers
	2.6 Checking tile level and perpendicularity to be within specified tolerance
	2.7 Mixing appropriate grout and applied in accordance with workplace and manufacturers' specifications/requirement
	2.8 Cleaning and polishing of surfaces of tiles

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
4. Resource Implications	4.1 Workplace (simulated or actual)
	4.2 Tiles installation tools and equipment
	4.3 Materials needed for tile laying
	4.4 Pens
	4.5 Papers
	4.6 Work books
	4.7 Tilesetting manual

Assessment Evidence Guide

1. Critical Aspects of Competency	Assessment required evidence that the candidate:
	1.1 Cut tiles without jagged, rough edges, breaks or damage to tile surfaces.
	1.2 Used tile jolly to form a miter at the joint in accordance with workplace procedures and manufacturers' recommendations.
	1.3 Applied bonding material/adhesive on the floor surface using a notched trowel.
	1.4 Laid tiles on the floor grid with minimum voids and maintain fully bedded alignment in accordance with specifications.
	1.5 Position the tiles in place using required spacers.
	1.6 Checked tile level and perpendicularity to be within specified tolerance.
	1.7 Mixed appropriate grout and applied in accordance with workplace and manufacturers' specifications/requirement.
	1.8 Surfaces of tiles are cleaned and polished with cloth/sponge removing all dust and dirt from surface and joints.
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: **INSTALL TILES ON WALLS**	Nominal Duration: 56 hrs.	Unit Code: SEIP-CON-TIL-3-O
Unit Descriptor: This unit covers the knowledge, skills and attitudes required for a worker to install tiles on walls in construction. It specifically includes the tasks of planning and preparing tile for wall installation, cutting tiles as required, laying wall tiles, grouting wall tile joints, cleaning/maintaining work area.		

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. Plan and prepare for tile installation on wall	1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied. 1.2 **Safety and environmental requirements** are followed in accordance with Workplace and OHS policies. 1.3 Signage/barricade requirements are identified and implemented. 1.4 **Tools and equipment** are gathered and checked for serviceability and any faults are rectified or reported prior to start of work. 1.5 **Materials** appropriate to the work application are identified, and prepared at work site. 1.6 Tiles are checked in accordance with workplace plan and specifications. 1.7 Tile grid patterns and lay out design are determined and set out in accordance with workplace specifications and requirements.
2. Cut tiles as required	2.1 Tiles are cut without jagged, rough edges, breaks or damage to tile surfaces. 2.2 Recess hole or curve is cut by hand or machine to shape and size in accordance with specified tolerance. 2.3 Tile jolly is edged to form a miter at the joint in accordance with workplace procedures and manufacturers' recommendations.
3. Lay tiles on wall	3.1 **Wall items** are removed and stored in accordance with workplace procedure. 3.2 Wall base layer is checked for condition and for being structurally rigid. 3.3 Identify tile location and establish the vertical and horizontal middle position on the wall using appropriate levelling, aligning and measuring tools. 5.3 Tiles are positioned on the identified grid in accordance with specified pattern for sampling purposes. 3.4 Batten material is placed on the wall aligned with the lay out to help in the alignment and levelling of the tiles. 3.5 **Bonding material**/adhesive is applied on the wall surface using a tiling trowel in accordance with workplace techniques.

	3.6 Tiles are laid on the wall observing the proper technique and maintaining fully bedded alignment to specifications.
	3.7 Position the tiles in place using appropriate spacers.
	3.8 Tile level and perpendicularity is regularly checked to be within specified tolerance.
	3.9 Partial tiles needed in some areas are set out and cut using appropriate cutting tool/equipment.
	3.10 Corners are kept square within specified tolerance and finish to specifications.
4. Grout wall tile joints	4.1 All tile joints are cleaned and prepared to receive grout in accordance with workplace specifications.
	4.2 Grout is mixed and applied in accordance with workplace and manufacturers' specifications and requirements.
	4.3 Excess grout/adhesives are removed between tiles.
	4.4 Surfaces of tiles are cleaned and polished with cloth/sponge removing all dust and dirt from surface and joints.
	4.5 Tiles are left undisturbed for curing within the specified time in accordance with workplace requirements and specification.
5. Clean/maintain work area	5.1 Work area is cleared and materials disposed of, reused or recycled in accordance with workplace requirements.
	5.2 Tools and equipment are cleaned, checked, maintained and stored in accordance with workplace /manufacturer's requirements.

Range of Variables

Variable	Range
	May include but not limited to:
1. Safety and environmental requirements	1.1 Wearing of PPEs
	1.2 Installing safety barrier lines/guards
	1.3 Proper lighting
	1.4 Using dust collector
	1.5 Proper disposal of garbage and excess materials
	1.6 Availability of first aid kit
	1.7 Guarding rotating parts of power tools
2. Tools and equipment	2.1 Tools
	2.1.1 Tile cutter (Manual)
	2.1.2 Mechanical pliers
	2.1.3 Adjustable wrench
	2.1.4 Screw drivers
	2.1.5 Spatula
	2.1.6 Notched trowel
	2.1.7 Level
	2.1.8 Measuring tape
	2.1.9 Grout float
	2.1.10 Saw
	2.1.11 Tile spacers
	2.1.12 Caulking guns

	2.1.13 Hammers (plastic faced /rubber faced
	2.1.14 Mallet (plastic, rubber)
	2.1.15 Grouting tool
	2.2 Equipment
	   2.2.1 Portable drill
	   2.2.2 Portable grinder
	   2.2.3 Levelling equipment
	   2.2.4 Tile/marble cutting machine

3. Materials	3.1 Cement 3.2 Sand 3.3 Thin set 3.4 Tile underlayment 3.5 Grout release agent 3.6 Tile and grout sealer 3.7 Tiles 3.8 Marbles 3.9 Sponge 3.10 Chalk/marker
4. Wall items	4.1 Wall papers 4.2 Paints 4.3 Picture frames 4.4 Old wall paints 4.5 Light switch 4.6 Wall clocks 4.7 Built in cabinets
5. Bonding material	5.1 Grout 5.2 Tile adhesive 5.3 Marble adhesive 5.4 Mortar 5.5 Thin set

Curricular Content Guide

1. Underpinning Knowledge	1.1 Workplace requirements on tile design and layout patterns 1.2 Method and purpose of installing batten material 1.3 Types of materials used for making tile battens 1.4 Types of bonding materials used for tile adhesion on walls 1.5 Methods and techniques of applying bonding/adhesive material when installing tiles on walls 1.6 Tile laying techniques on walls 1.7 Types of grouting materials 1.8 Procedure of mixing and preparing of grouting materials 1.9 Procedure of cleaning surfaces of tiles and polishing 1.10 Tile curing specifications 1.11 Workplace cleaning, maintaining and storing procedures for tools and equipment

2. Underpinning Skills	2.1 Determining and setting out tile grid patterns and design in accordance with workplace specifications and requirements
	2.2 Placing batten material on the wall aligned with the lay out to help in the alignment and levelling of the tiles
	2.3 Applying bonding material/adhesive on the wall surface using a tiling trowel in accordance with workplace techniques
	2.4 Laying tiles on the wall and observing the proper technique with minimum voids while maintaining alignment.
	2.5 Mixing grout and applying in accordance with workplace and manufacturers' specifications/requirements
	2.6 Cleaning surfaces of tiles and polishing using cloth/sponge.
	2.7 Curing tiles within the specified time in accordance with workplace requirements and specification.
	2.8 Cleaning, checking, maintaining and storing tools and equipment in accordance with workplace requirements.
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
4. Resource Implications	4.1 Workplace (simulated or actual)
	4.2 Tiles and marble installation tools and equipment
	4.3 Materials needed for tile and marble laying
	4.4 Pens
	4.5 Papers
	4.6 Work books
	4.7 Tile and marble setting instruction manual

Assessment Evidence Guide

1. Critical Aspects of Competency	Assessment required evidence that the candidate:
	1.1 Determined tile grid patterns and lay out design in accordance with workplace specifications.
	1.2 Placed batten material on the wall to help in the alignment and levelling of the tiles.
	1.3 Applied bonding material/adhesive on the wall surface using a tiling trowel in accordance with workplace techniques.
	1.4 Laid tiles on the wall observing proper technique with minimum voids and maintaining alignment.
	1.5 Mixed grout and applied in accordance with workplace specifications.
	1.6 Cleaned surfaces of tiles and polished with cloth/sponge removing all dust and dirt from surface and joints.
	1.7 Left tiles undisturbed for curing within the specified time in accordance with workplace requirements.

	1.8 Cleaned, checked, maintained and stored tools and equipment 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: **PERFORM MARBLE INSTALLATION ON FLOORS**	Nominal Duration: 60 hrs.	Unit Code: SEIP-CON-TIL-4-O

Unit Descriptor:
This unit covers the knowledge, skills and attitudes required for a worker to perform marble installation on floors in construction sector. It specifically includes the tasks of planning and preparing for marble installation on floors, cutting marble slabs as required, laying marble slabs on floor, grouting marble slab joints, cleaning/maintaining work area.

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. Plan and prepare for marble installation on floors	1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied. 1.2 **Safety and environmental requirements** are followed in accordance with workplace and OHS policies. 1.3 Signage/barricade requirements are identified and implemented. 1.4 **Tools and equipment** are gathered and checked for serviceability and faults are rectified or reported prior to start of work. 1.5 **Materials** appropriate to the application are identified and prepared at work site. 1.6 Marble slabs are checked for conformity to size, patterns, color and characteristics in accordance with plans and specifications. 1.7 Marble slab grid patterns and lay out design are determined and set out in accordance with workplace specifications.
2. Cut marble slabs as required	2.1 Marble slabs are cut without jagged, rough edges, breaks or damage to surfaces. 2.2 Recess hole or curve is cut by hand or machine to shape and size in accordance with workplace specification. 2.3 Edges are grounded to form a miter at the joint in accordance with workplace procedures and specifications.
3. Lay marble slabs on floor	3.1 Subfloor is checked to ensure surface preparations are in order and leveled. 3.2 Marble slabs are placed on the identified grid following the specified pattern serving as dry run. 3.3 **Bonding material**/adhesive is applied on the floor surface using a trowel. 3.4 Marble slabs are laid on the floor grid with minimum voids and maintain fully bedded alignment in accordance with specifications. 3.5 Position the marble slabs in place using required spacers. 3.6 Levelling and perpendicularity is regularly checked using appropriate tools and within specified tolerance.

	3.7 Partial/irregular marble slab sizes are set out, cut and laid using appropriate cutting tool/equipment.
	3.8 Corners are kept square within specified tolerance and finished to specifications.
4. Grout marble slab joints	4.1 All tile joints are cleaned and prepared in accordance with to workplace specification.
	4.2 Grout is mixed and applied in accordance with workplace and manufacturers' specifications.
	4.3 Excess grout/adhesives are removed between marble slabs.
	4.4 Surfaces of marble slabs are cleaned and polished with cloth/sponge removing.
	4.5 Laid marble slabs are left undisturbed for curing within the specified time in accordance with workplace specification.
5. Clean/maintain work area	5.1 Work area is cleared and materials disposed of, reused or recycled in accordance with workplace requirements.
	5.2 Tools and equipment are cleaned, checked, maintained and stored in accordance with workplace requirements.

Range of Variables

Variable	Range
	May include but not limited to:
1. Safety and environmental requirements	1.1 Wearing of PPEs
	1.2 Installing safety barrier lines/guards
	1.3 Proper lighting
	1.4 Using dust collector
	1.5 Proper disposal of garbage and excess materials
	1.6 Availability of first aid kit
	1.7 Guarding rotating parts of power tools
2. Tools and equipment	2.1 Tools
	2.1.1 Marble cutter (Manual)
	2.1.2 Mechanical pliers
	2.1.3 Adjustable wrench
	2.1.4 Screw drivers
	2.1.5 Spatula
	2.1.6 Notched trowel
	2.1.7 Spirit Level
	2.1.8 Tri-square
	2.1.9 Tape measure
	2.1.10 Grout float
	2.1.11 Wet saw
	2.1.12 Tile spacers
	2.1.13 Caulking guns
	2.1.14 Hammers (plastic faced /rubber faced
	2.1.15 Mallet (plastic, rubber)
	2.1.16 Grouting tool
	2.2 Equipment
	2.2.1 Portable drill

	2.2.2 Portable grinder
	2.2.3 Levelling equipment
	2.2.4 Tile/marble cutting machine
3. Materials	3.1 Cement
	3.2 Sand
	3.3 Thin set
	3.4 Tile underlayment
	3.5 Grout release agent
	3.6 Tile and grout sealer
	3.7 Marbles
	3.8 Sponge
	3.9 Chalk/marker
4. Bonding material	4.1 Grout
	4.2 Tile adhesive
	4.3 Marble adhesive
	4.4 Mortar
	4.5 Thin set

Curricular Content Guide

1. Underpinning Knowledge	1.1 Types of marble stones and their characteristics
	1.2 Methods of determining marble slab grid pattern
	1.3 Procedure and technique for laying of marble slabs
	1.4 Method of applying uniformity in spacing of marble slab during laying out
	1.5 Types of levelling tools and their application
	1.6 Procedure and methods of checking levelness, flatness and perpendicularity of marble slabs
	1.7 Grouting materials and method of mixing
	1.8 Application procedure of grouting materials
	1.9 Method of cleaning surfaces of marble slabs and polishing
	1.10 Workplace standard requirements for using of marble slabs
	1.11 Cleaning, checking, maintaining tools and equipment and Workplace procedures on storing
2. Underpinning Skills	2.1 Determining marble slab grid patterns and laying out the specified design
	2.2 Laying marble slabs on the floor grid with minimum voids and maintaining fully bedded alignment to specifications
	2.3 Positioning the marble slabs in place using required spacers
	2.4 Checking the level and perpendicularity using appropriate tools and to be within specified tolerance
	2.5 Mixing grout and applying in accordance with workplace requirements
	2.6 Cleaning surfaces of marble slabs and polishing with cloth/sponge
	2.7 Curing marble slabs within the specified time in accordance with workplace specification.

	2.8 Cleaning, checking and maintaining and storing tools and equipment in accordance with workplace requirements.
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 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 Marble installation tools and equipment 4.3 Materials needed for marble laying 4.4 Pens 4.5 Papers 4.6 Work books 4.7 Marble installation manual

Assessment Evidence Guide

1. Critical Aspects of Competency	Assessment required evidence that the candidate: 1.1 Determined marble slab grid patterns in accordance with workplace specifications. 1.2 Laid marble slabs on the floor grid with minimum voids and maintain alignment to specifications. 1.3 Positioned the marble slabs in place using required spacers 1.4 Checked levelling and perpendicularity using appropriate checking tool in accordance with specified tolerance. 1.5 Mixed grout and applied in accordance with workplace/manufacturers' specifications. 1.6 Cleaned surfaces of marble slabs and polished with cloth/sponge. 1.7 Cured marble slabs within the specified time in accordance with workplace specification. 1.8 Cleaned, checked, maintained tools and equipment and stored 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: **PERFORM RUSTIC STONE WORKS**	Nominal Duration: 48 hrs.	Unit Code: SEIP-CON-TIL-5-O

Unit descriptor:
This unit covers the knowledge, skills and attitudes required for a worker to perform rustic stone works in construction sector. It specifically includes the tasks of planning and preparing for rustic stone panel installation on walls, applying mortar material on wall, laying rustic stone panels on wall and cleaning/maintaining work area.

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. Plan and prepare for rustic stone panel installation on walls	1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied. 1.2 **Safety and environmental requirements** are followed in accordance with workplace and OHS policies. 1.3 Signage/barricade requirements are identified and implemented. 1.4 **Tools and equipment** are gathered and checked for serviceability and faults are rectified or reported prior to start of work. 1.5 **Materials** appropriate to the work application are identified, prepared and located at work site. 1.6 Stone panels/veneers are checked for conformity to size, pattern and color in accordance with plans and specifications. 1.7 Rustic stone installation patterns and lay out are determined and set out in accordance with workplace specifications.
2. Apply mortar material on wall	2.1 Wall panel is checked to ensure surface preparations are in order and leveled. 2.2 Galvanized wire or metal board is fixed to the wall in order to trap and hold the mortar. 2.3 Mortar is mixed and applied on the metal board. 2.4 Excess mortar is remove using appropriate tool and apply appropriate thickness and level in accordance with workplace specification. 2.5 Mortar on wall is allowed to dry in accordance with workplace specification.
3. Lay rustic stone panels/veneers on wall	3.1 Mortar components are mixed to specified consistency in accordance with workplace specification 3.2 Mixed mortar is applied on the back of the rustic stone panel and laid on the wall in accordance with workplace design specification. 3.3 Remove excess mortar from spaces/gaps in between rustic stone panels using appropriate tool.

	3.4 Partial/irregular rustic stone sizes are cut using appropriate stone cutting tool. 3.5 Corners are kept square within specified tolerance and finished to specifications. 3.6 Newly laid out rustic stone panels on wall are allowed to be cured in accordance with workplace specification.
4. Apply grout on spaces of rustic stone panels	4.1 All rustic stone joints are cleaned and prepared for grouting in accordance with work place specifications. 4.2 Grout material is mixed and applied in accordance with workplace specifications. 4.3 Excess grout removed between rustic stone panels. 4.4 Surfaces of rustic stone panels are cleaned and polished with cloth/sponge removing all dust and dirt from surface and joints. 4.5 Newly laid rustic stone panels are left undisturbed for curing within the specified time in accordance with workplace requirements and specification.
5. Clean/maintain work area	5.1 Work area is cleared and materials disposed of, reused or recycled in accordance with workplace requirements. 5.2 Tools and equipment are cleaned, checked, maintained and stored in accordance with workplace requirements.

Range of Variables

Variable	Range
	May include but not limited to:
1. Safety and environmental requirements	1.1 Wearing of PPEs 1.2 Installing safety barrier lines/guards 1.3 Proper lighting 1.4 Using dust collector 1.5 Proper disposal of garbage and excess materials 1.6 Availability of first aid kit 1.7 Guarding rotating parts of power tools

2. Tools and equipment	2.1 Tools
	    2.1.1 Mechanical pliers
	    2.1.2 Adjustable wrench
	    2.1.3 Screw drivers
	    2.1.4 Spatula
	    2.1.5 Notched trowel
	    2.1.6 Spirit Level
	    2.1.7 Tri-square
	    2.1.8 Tape measure
	    2.1.9 Grout float
	    2.1.10 Tile spacers
	    2.1.11 Hammers (claw, chipping)
	    2.1.12 Mallet (plastic, rubber)
	    2.1.13 Grouting tool
	    2.1.14 Industrial Stapler
	    2.1.15 Whisk broom

	2.2 Equipment
	2.2.1 Portable drill
	2.2.2 Portable grinder
	2.2.3 Levelling equipment
3. Materials	3.1 Mortar materials
	3.2 Metal lath/screen
	3.3 Sand
	3.4 Grouting material
	3.5 Sponge
	3.6 Rustic stone
	3.7 Chalk/marker

Curricular Content Guide

1. Underpinning Knowledge	1.1	Procedure in fixing of galvanized metal wire or metal board on the wall
	1.2	Mortar mixing procedure
	1.3	Method and technique of applying mortar on metal board
	1.4	Procedure of laying rustic stone on wall
	1.5	Procedure of removing excess mortar materials in between the rustic stones
	1.6	Grouting materials and their properties
	1.7	Procedure of mixing grout materials
	1.8	Grout application procedures
	1.9	Curing specification requirements for rustic stone installation
	1.10	OHS requirements for rustic stone works in construction
	1.11	Workplace/manufacturer's requirements on tools and equipment maintenance and storing
2. Underpinning Skills	2.1	Fixing galvanized wire or metal board to the wall
	2.2	Mixing mortar and applying on the metal board
	2.3	Drying of mortar
	2.4	Laying of rustic stone panelson the wall in accordance with design pattern
	2.5	Applying mortar in between gaps of rustic stone panels
	2.6	Removing excess mortar and leveling using appropriate levelling tool
	2.7	Cutting partial/irregular rustic stone sizes using appropriate stone cutting tool.
	2.8	Mixing grout and applying in accordance with workplace specification.
	2.9	Curing of newly laid rustic stone within specified time in accordance with workplace requirements and specification.
	2.10	Cleaning, checking, maintaining tools and equipment and storing in accordance with workplace requirements.
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
	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 Rustic stone installation tools and equipment
	4.3 Materials needed for stone laying
	4.4 Pens
	4.5 Papers
	4.6 Work books
	4.7 Rustic stone installation manual

Assessment Evidence Guide

1. Critical Aspects of Competency	Assessment required evidence that the candidate:
	1.1 Nailed/fixed galvanized wire or metal board to the wall in order to trap and hold the mortar mix.
	1.2 Mixed mortar and applied on the metal lath and allow to dry in accordance with workplace specification.
	1.3 Applied mortar on the back of the rustic stone panels and laid on the wall in accordance with design pattern.
	1.4 Removed excess mortar in between stones for grouting application.
	1.5 Cut partial/irregular rustic stone sizes using appropriate stone cutting tool.
	1.6 Mixed grout and applied in accordance with workplace and manufacturers' specifications/requirements
	1.7 Allowed curing of laid rustic stone within the specified time in accordance with workplace requirements and specification
	1.8 Cleaned, checked, maintained tools and equipment and stored in accordance with workplace/manufacturer's 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: **PERFORM TILE AND MARBLE REPAIR WORKS**	Nominal Duration: 34 hrs.	Unit Code: SEIP-CON-TIL-6-O

Unit descriptor:
This unit covers the knowledge, skills and attitudes required for a worker to perform tile and marble repair works in construction sector. It specifically includes the tasks of planning and preparing for tile and marble repair works, repairing damaged tile work, repairing damaged marble work and cleaning/maintaining work area.

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. Plan and prepare for tile and marble repair works	1.1 Work instructions and operational details are obtained confirmed and applied. 1.2 **Safety and environmental requirements** are followed in accordance with workplace and OHS policies. 1.3 Signage/barricade requirements are identified and implemented. 1.4 **Tools and equipment** are gathered and checked for serviceability and any faults are rectified or reported prior to start of work. 1.5 **Materials** appropriate to the work application are identified, obtained and located at work site. 1.6 Tiles/marble slabs are checked for conformity to size, patterns, colors and characteristics in accordance with plans and specifications 1.7 Installation patterns and lay out design are determined and set out in accordance with workplace specifications and requirements
2. Repair damaged tile work	2.1 Damaged tiles are removed carefully avoiding further harm to adjacent tiles. 2.2 Old sheathing/bedding is cleared and cleaned to allow proper adhesion of new tile 2.3 Replacement tiles are selected and cut where applicable to match existing face, size, color and design pattern 2.4 Tiles are fitted and fixed to maintain alignment and with uniform spacing on joints. 2.5 Grouting is carried out in accordance with workplace specification. 2.6 Tile face is cleaned to specified finish
3. Repair damaged marble work	3.1 Damaged marble slabs are removed carefully avoiding further harm to adjacent marble slabs. 3.2 Old sheathing/bedding is cleared and cleaned to allow proper adhesion of new marble slab. 3.3 Replacement marble slabs are selected and cut where applicable to match existing face, size, color and design pattern.

	3.4 Marble slabs are fitted and fixed maintaining alignment and spacing on joints
	3.5 Grouting is carried out in accordance with workplace specification.
	3.6 Marble face is cleaned to specified finish.
4. Clean/maintain work area	4.1 Work area is cleared and materials disposed of, reused or recycled in accordance with workplace requirements.
	4.2 Tools and equipment are cleaned, checked, maintained and stored in accordance with workplace requirements.

Range of Variables

Variable	Range
	May include but not limited to:
1. Safety and environmental requirements	1.1 Wearing of PPEs 1.2 Installing safety barrier lines/guards 1.3 Proper lighting 1.4 Using dust collector 1.5 Proper disposal of garbage and excess materials 1.6 Availability of first aid kit 1.7 Guarding rotating parts of power tools

2. Tools and equipment	2.1 Tools
	    2.1.1 Mechanical pliers
	    2.1.2 Adjustable wrench
	    2.1.3 Screw drivers
	    2.1.4 Spatula
	    2.1.5 Notched trowel
	    2.1.6 Spirit Level
	    2.1.7 Tri-square
	    2.1.8 Tape measure
	    2.1.9 Grout float
	    2.1.10 Tile spacers
	    2.1.11 Hammers (claw, chipping)
	    2.1.12 Mallet (plastic, rubber)
	    2.1.13 Grouting tool
	    2.1.14 Industrial Stapler
	    2.1.15 Whisk broom
	2.2 Equipment
	    2.2.1 Portable drill
	    2.2.2 Portable grinder
	    2.2.3 Levelling equipment

3. Materials	3.1 Mortar materials 3.2 Water 3.3 Sand 3.4 Grouting material 3.5 Sponge 3.6 Rustic stone

	3.7 Chalk/marker

Curricular Content Guide

1. Underpinning Knowledge	1.1 Workplace installation patterns and lay out design for tiles and marbles 1.2 Tile replacement and selection process 1.3 Tile cutting procedure and technique 1.4 Safety requirements when cutting of tiles and marble 1.5 Marble replacement and selection process 1.6 Procedures of fitting tiles on floors and walls 1.7 Procedure and techniques of fitting marble slab on floors and walls 1.8 Techniques in cutting marble slabs to size 1.9 Levelling and aligning methods 1.10 Types of grouting materials and their mixing procedure 1.11 Procedures and techniques of laying/fitting marble slabs and maintaining alignment and joint spacing 1.12 Carrying out grouting in accordance with workplace specification 1.13 Checking, maintaining and storing tools and equipment in accordance with workplace/manufacturer's requirements
2. Underpinning Skills	2.1 Determining installation patterns, laying out design and setting out in accordance with workplace specifications and requirements 2.2 Selecting replacement tiles and cutting where applicable to match existing face, size, color and design pattern 2.3 Fixing of tiles to maintain alignment and uniform spacing of joints 2.4 Carrying-out grouting in accordance with workplace specification 2.5 Selecting marble slabs for replacement and cutting to match existing face, size, color and design pattern 2.6 Fitting marble slabs and fixing to maintain alignment with joints and maintain spacing 2.7 Applying grouting in accordance with workplace specification 2.8 Checking, maintaining and storing tool and equipment in accordance with workplace/manufacturer's requirements.
3. Underpinning Attitudes	3.1 Cleanliness/tidiness 3.2 Commitment to Occupational Health and Safety(OHS) practices 3.3 Environmental concerns 3.4 Eagerness to learn 3.5 Timeliness 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 Tile and marble installation tools and equipment

	4.3 Materials needed for tile and marble laying
	4.4 Pens
	4.5 Papers
	4.6 Work books
	4.7 Tile and marble installation manual

Assessment Evidence Guide

1. Critical Aspects of Competency	Assessment required evidence that the candidate: 1.1 Determined tile installation lay out design and set out in accordance with workplace specifications and requirements. 1.2 Selected tiles for replacement and cut to match existing face, size, color and design pattern. 1.3 Tiles are fixed to maintain alignment with joints and uniform spacing. 1.4 Carried out grouting in accordance with workplace specification. 1.5 Selected marble slabs for replacement and cut to match existing face, size, color and design pattern. 1.6 Laid marble slabs are fixed to maintain alignment with joints and uniform spacing. 1.7 Carried out grouting in accordance with workplace specification. 1.8 Checked, maintained and stored tools and equipment 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.

End of Competency Standard

Assessment Guide

A Framework for Effective Assessment

Tile And Marble Works

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

Section Two: Roles and Responsibilities

Section Three: Tools and Templates

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: Perform Tile and Marble Laying Preparation Work

Candidate's name:	
Assessor's name:	

Qualification:	Tile and Marble Work
Project-Based Assessment Title	
Units of competency covered:	Perform Tile and Marble Laying Preparation Work
Date of assessment:	
Time of assessment:	

Instructions for demonstration
Please see attached Instruction for Demonstration (Candidate/Assessor)

Supplies and Materials	Tools and equipment
▪ Please refer to attached specific instruction	• 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. Gather tools and equipment and check for serviceability, rectifying faults or reporting on them prior to start of work	☐	☐	☐
2. Identify and gather material requirements in accord with plans and/or specs	☐	☐	☐
3. Check tile and marble materials for product suitability, conformity to specs and compatibility with surface material, preparation and/or specs	☐	☐	☐
4. Carry out material preparation to satisfy application process requirements	☐	☐	☐
5. Identify tile and marble installation design pattern in accord to workplace/design requirements	☐	☐	☐
6. Identify subfloor structure and clean surfaces to remove contaminants/foreign and loose materials in accord with Supervisor's instructions	☐	☐	☐
7. Proportion underlay materials, if specified, and mix to instructions ready for application	☐	☐	☐
8. Lay underlay materials on subfloor in accord with workplace and construction plan/design	☐	☐	☐
	☐	☐	☐

Observation Checklist: Perform Tile and Marble Laying Preparation Work

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

Unit of Competency:	Perform Tile and Marble Laying Preparation Work
Code:	**SEIP-CON-TIL-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. Gather tools and equipment and check for serviceability, rectifying faults or reporting on them prior to start of work		
2. Identify and gather material requirements in accord with plans and/or specs		
3. Check tile and marble materials for product suitability, conformity to specs and compatibility with surface material, preparation and/or specs		
4. Carry out material preparation to satisfy application process requirements		
5. Identify tile and marble installation design pattern in accord to workplace/design requirements		
6. Identify subfloor structure and clean surfaces to remove contaminants/foreign and loose materials in accord with Supervisor's instructions		
7. Proportion underlay materials, if specified, and mix to instructions ready for application		
8. Lay underlay materials on subfloor in accord with workplace and construction plan/design		

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

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

Oral Questions Checklist: Perform Tile and Marble Laying Preparation Work

Candidate's name:	
Assessor's name:	

Date of Assessment:	
Assessment Venue:	
Unit of Competency:	Perform Tile and Marble Laying Preparation Work
Reference Standard:	**Tile and Marble Work**

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 purpose of underlay materials?		
2. What do you do if tile and marble materials are not suitable and do not conform to specs?		
3. How important is signage for work operations in general?		
4. How important is a tile and grout sealer?		
5. Is a commitment to health and safety necessary in your work?		
6. What is involved in cleaning and preparing a subfloor prior to tile and marble installation?		
7. What is done with surface mounted structures?		

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: Install Tiles on Floors

Candidate's name:	
Assessor's name:	
Qualification:	Tile and Marble Work

Project-Based Assessment Title	
Units of competency covered:	Install Tiles on Floors
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. Cut tiles skilfully without damaging tile surfaces	☐	☐	☐
2. Edge tile jolly to form a miter at joint in accord with workplace procedures and manufacturer's recommendations	☐	☐	☐
3. Apply bonding material/adhesive on floor surface using a notched trowel	☐	☐	☐
4. Lay tiles on floor grid with minimum voids and maintain fully bedded alignment to specs	☐	☐	☐
5. Position tiles in place using required spacers	☐	☐	☐
6. Check tile level and perpendicularity to be within specified tolerance	☐	☐	☐
7. Mix appropriate grout and apply in accord with workplace and manufacturer's specs/requirements	☐	☐	☐
8. Clean and polish tile surfaces with cloth/sponge removing dust/dirt from surfaces	☐	☐	☐
	☐	☐	☐

Observation Checklist: Install Tiles on Floors

Candidate's name:	
Assessor's name:	
Date of Assessment:	
Unit of Competency:	Install Tiles on Floors

Code:	SEIP-CON-TIL-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. Cut tiles skilfully without damaging tile surfaces		
2. Edge tile jolly to form a miter at joint in accord with workplace procedures and manufacturer's recommendations		
3. Apply bonding material/adhesive on floor surface using a notched trowel		
4. Lay tiles on floor grid with minimum voids and maintain fully bedded alignment to specs		
5. Position tiles in place using required spacers		
6. Check tile level and perpendicularity to be within specified tolerance		
7. Mix appropriate grout and apply in accord with workplace and manufacturer's specs/requirements		
8. Clean and polish tile surfaces with cloth/sponge removing dust/dirt from surfaces		

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

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

Oral Questions Checklist: Install Tiles on Floors

Candidate's name:	
Assessor's name:	
Date of Assessment:	
Assessment Venue:	
Unit of Competency:	Install Tiles on Floors
Reference Standard:	**Tile and Marble Work**

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 purpose of a tile jolly?		
2. How important is a knowledge of bonding material?		
3. Why is perpendicularity checked?		
4. How important is safety in tile work?		
5. What is a useful method for aligning and levelling tiles?		
6. How important is using a grid in tile 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: Install Tiles on Walls

Candidate's name:	
Assessor's name:	

Qualification:	Tile and Marble Work		
Project-Based Assessment Title			
Units of competency covered:	Install Tiles on Walls		
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. Determine tile grid patterns and layout design/setup in accord with workplace specs/requirements	☐	☐	☐
2. Place batten material on wall aligned with layout to help in alignment and levelling of tiles	☐	☐	☐
3. Apply bonding material/adhesive on surface using tiling trowel in accord with workplace techniques	☐	☐	☐
4. Lay tiles on wall observing proper technique with minimum voids while maintaining fully bedded alignment to specs	☐	☐	☐
5. Mix grout and apply in accord with workplace/manufacturer's specs/requirements	☐	☐	☐
6. Clean tile surfaces and polish with cloth/sponge removing all dust/dirt from surfaces and joints	☐	☐	☐
7. Allow tiles to cure for specified time in accord with workplace requirements	☐	☐	☐
8. Clean, check, and maintain tools and equipment in accord with workplace/manufacturer's requirements	☐	☐	☐
	☐	☐	☐

Observation Checklist: Install Tiles on Walls

Candidate's name:	
Assessor's name:	

Date of Assessment:	
Unit of Competency:	Install Tiles on Walls
Code:	**SEIP-CON-TIL-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. Determine tile grid patterns and layout design/setup in accord with workplace specs/requirements		
2. Place batten material on wall aligned with layout to help in alignment and levelling of tiles		
3. Apply bonding material/adhesive on surface using tiling trowel in accord with workplace techniques		
4. Lay tiles on wall observing proper technique with minimum voids while maintaining fully bedded alignment to specs		
5. Mix grout and apply in accord with workplace/manufacturer's specs/requirements		
6. Clean tile surfaces and polish with cloth/sponge removing all dust/dirt from surfaces and joints		
7. Allow tiles to cure for specified time in accord with workplace requirements		
8. Clean, check, and maintain tools and equipment in accord with workplace/manufacturer's requirements		

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

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

Oral Questions Checklist: Install Tiles on Walls

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

Assessment Venue:	
Unit of Competency:	Install Tiles on Walls
Reference Standard:	**Tile and Marble Work**

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. How important is it to mix grout according to the manufacturer's specs?		
2. What can happen if tools are not properly maintained?		
3. What types of materials are used for making tile battens?		
4. How important is a commitment to safety on the job?		
5. What is the purpose of a notched trowel?		
6. What is the difference in technique between laying tiles on the wall as opposed to laying tiles on the floor?		

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: Perform Marble Installation on Floors

Candidate's name:	

Assessor's name:	
Qualification:	Tile and Marble Work
Project-Based Assessment Title	
Units of competency covered:	Perform Marble Installation on Floors
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. Determine marble slab grid patterns and lay out design in accord with workplace specs/requirements	☐	☐	☐
2. Lay marble slabs on floor grid with minimum voids and maintain fully bedded alignment to specs	☐	☐	☐
3. Position marble slabs in place using spacers	☐	☐	☐
4. Check levelling and perpendicularity regularly using appropriate tools within specified tolerance	☐	☐	☐
5. Mix grout and apply in accord with workplace/manufacturer's specs/requirements	☐	☐	☐
6. Clean surfaces of marble slabs and polish with cloth/sponge removing dust/dirt from surfaces and joints	☐	☐	☐
7. Cure marble slabs within specified time in accord with workplace specs/requirements	☐	☐	☐
8. Clean, check, and maintain tools and equipment and store in accord with workplace/manufacturer's specs/requirements	☐	☐	☐
	☐	☐	☐

Observation Checklist: Perform Marble Installation on Floors

Candidate's name:	

Assessor's name:	
Date of Assessment:	
Unit of Competency:	Perform Marble Installation on Floors
Code:	**SEIP-CON-TIL-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. Determine marble slab grid patterns and lay out design in accord with workplace specs/requirements		
2. Lay marble slabs on floor grid with minimum voids and maintain fully bedded alignment to specs		
3. Position marble slabs in place using spacers		
4. Check levelling and perpendicularity regularly using appropriate tools within specified tolerance		
5. Mix grout and apply in accord with workplace/manufacturer's specs/requirements		
6. Clean surfaces of marble slabs and polish with cloth/sponge removing dust/dirt from surfaces and joints		
7. Cure marble slabs within specified time in accord with workplace specs/requirements		
8. Clean, check, and maintain tools and equipment and store in accord with workplace/manufacturer's specs/requirements		

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

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

Oral Questions Checklist: Perform Marble Installation on Floors

Candidate's name:	
Assessor's name:	
Date of Assessment:	
Assessment Venue:	
Unit of Competency:	Perform Marble Installation on Floors
Reference Standard:	**Tile and Marble Work**

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 meant by laying marble on floor grid with "minimum voids."		
2. What are the environmental concerns in this work?		
3. What is meant by "perpendicularity."		
4. How important is it to read specs correctly?		
5. Is a commitment to occupational health and safety important?		
6. To what extent are spacers important when positioning marble slabs?		

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: Perform Rustic Stone Works

Candidate's name:	
Assessor's name:	
Qualification:	Tile and Marble Work
Project-Based Assessment Title	
Units of competency covered:	Perform Rustic Stone Works
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. Nail/fix galvanized wire or metal lath to wall to trap and hold mortar mix	☐	☐	☐
2. Mix mortar and apply on metal lath and allow to dry in accord with workplace specs	☐	☐	☐
3. Apply mortar on back of rustic stone panels and lay on wall considering installation design pattern	☐	☐	☐
4. Remove excess mortar using proper tool and provide space between stones in accord with workplace specs	☐	☐	☐
5. Cut partial/irregular rustic stone sizes using appropriate stone cutting tool	☐	☐	☐
6. Mix grout and apply in accord with workplace/manufacturer's specs/requirements	☐	☐	☐
7. Allow curing of laid rustic stone within specified time in accord with workplace requirements	☐	☐	☐
8. Clean, check, and maintain tools and equipment and store in accord with workplace/manufacturer's specs/requirements	☐	☐	☐
	☐	☐	☐

Observation Checklist: Perform Rustic Stone Works

Candidate's name:	

Assessor's name:	
Date of Assessment:	
Unit of Competency:	Perform Rustic Stone Works
Code:	**SEIP-CON-TIL-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. Nail/fix galvanized wire or metal lath to wall to trap and hold mortar mix		
2. Mix mortar and apply on metal lath and allow to dry in accord with workplace specs		
3. Apply mortar on back of rustic stone panels and lay on wall considering installation design pattern		
4. Remove excess mortar using proper tool and provide space between stones in accord with workplace specs		
5. Cut partial/irregular rustic stone sizes using appropriate stone cutting tool		
6. Mix grout and apply in accord with workplace/manufacturer's specs/requirements		
7. Allow curing of laid rustic stone within specified time in accord with workplace requirements		
8. Clean, check, and maintain tools and equipment and store in accord with workplace/manufacturer's specs/requirements		

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

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

Oral Questions Checklist: Perform Rustic Stone Works

Candidate's name:	
Assessor's name:	
Date of Assessment:	
Assessment Venue:	
Unit of Competency:	Perform Rustic Stone Works
Reference Standard:	**Tile and Marble Work**

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 best tool to use for removing excess mortar?		
2. What happens if not enough time is allowed for the curing process?		
3. What material is used on walls to trap and hold the mortar mix?		
4. Is grouting material the same for floors as for walls?		
5. How important is communication on the job?		
6. To what extent is safety a priority on the job?		

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: Perform Tile and Marble Repair Works

Candidate's name:	
Assessor's name:	
Qualification:	Tile and Marble Work
Project-Based Assessment Title	
Units of competency covered:	Perform Tile and Marble Repair Works
Date of assessment:	
Time of assessment:	

Instructions for demonstration

Please see attached Instruction for Demonstration (Candidate/Assessor)

Supplies and Materials	Tools and equipment
▪ Please refer to attached specific instruction	• 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. Determine tile installation patterns/layout design and set out in accord with workplace specs/requirements	☐	☐	☐
2. Select tiles for replacement and cut to match existing face, size, color, and design pattern	☐	☐	☐
3. Fix fitted tiles to maintain alignment with joints and uniform spacing	☐	☐	☐
4. Carry out grouting in accord with workplace specs	☐	☐	☐
5. Select marble slabs for replacement and cut to match existing face, size, color, and design pattern	☐	☐	☐
6. Fix laid marble slabs to maintain alignment with joints and uniform spacing	☐	☐	☐
7. Carry out grouting in accord with workplace specs	☐	☐	☐
8. Check, maintain, and store tools and equipment in accord with workplace/manufacturer's requirements	☐	☐	☐
	☐	☐	☐

Observation Checklist: Perform Tile and Marble Repair Works

Candidate's name:	
Assessor's name:	
Date of Assessment:	
Unit of Competency:	Perform Tile and Marble Repair Works
Code:	**SEIP-CON-TIL-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. Determine tile installation patterns/layout design and set out in accord with workplace specs/requirements		
2. Select tiles for replacement and cut to match existing face, size, color, and design pattern		
3. Fix fitted tiles to maintain alignment with joints and uniform spacing		
4. Carry out grouting in accord with workplace specs		
5. Select marble slabs for replacement and cut to match existing face, size, color, and design pattern		
6. Fix laid marble slabs to maintain alignment with joints and uniform spacing		
7. Carry out grouting in accord with workplace specs		
8. Check, maintain, and store tools and equipment in accord with workplace/manufacturer's requirements		

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

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

Oral Questions Checklist: Perform Tile and Marble Repair Works

Candidate's name:	
Assessor's name:	
Date of Assessment:	
Assessment Venue:	
Unit of Competency:	Perform Tile and Marble Repair Works
Reference Standard:	**Tile and Marble Work**

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 are the safety requirements when cutting tiles and marble?		
2. How important is tidiness during a job operation?		
3. What are the various types of grouting materials and their mixing procedure?		
4. What is an important consideration in the removal of damaged marble slabs?		
5. To what extent are environmental concerns a priority in tile and marble work?		
6. What is involved in the removal of waste materials?		

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:**