FEDERAL MINISTRY OF EDUCATION

National Skills Qualifications FOR TILING AND DECORATIVE STONEWORK

LEVEL 1, 2 & 3

February, 2025

NATIONAL BOARD FOR TECHNICAL EDUCATION NBTE

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THE WORLD BANK

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Plot B, Bida Road, P.M.B. 2239, Kaduna, Nigeria

NATIONAL SKILLS QUALIFICATION

TILING AND DECORATIVE STONEWORK

LEVEL 1-3

FEBRUARY,2025

Contents

level 1 3
summary 4
purpose of qualification 5
unit 1: health, safety and environment in tiling and decorative stonework 6
unit 2: communication systems in a work environment 9
unit 3: team work in a work environment 12
unit 4: basic tools, equipment and materials in tiling and decorative stonework 14
unit 5: surface preparation for tiling and stone decoration work 18
unit 6: mix preparation 20

level 2 23
summary: 24
purpose of qualification 24
unit 1: health, safety and environment 25
unit 2: communication systems in a work environment 27
unit 3: teamwork in a work environment 30
unit 4: interpret information on tile/stone work 32
unit 5: erection and dismantling of scaffolds, working platforms and ladders at the workplace 35
unit 6: preparation for tiling and stonework on wall/floor surfaces 38
unit 7: set out and fix tiles to wall/floor surface 40
unit 8: set out and lay stone floor surface 44
unit 9: forming sand & cement, cement & chippings or granite mix for terrazzo flooring. 47

level 3 50
summary 51
purpose of qualification 51
unit 1: health, safety and environment in tiling and decorative stonework 52
unit 2: communication systems in a work environment 56
unit 3: teamwork 58
unit 4: mathematics skills in tiling/decorative stonework 60
unit 5: estimating 62
unit 6: lay wall and floor tiles 64
unit 7: lay and install tile to internal and external corners 67
unit 8: lay tiles on curved surfaces 69
unit 9: decorative stone works 71
unit 10: repair of tile/stone works 73
unit 11: project planning 75

NATIONAL SKILLS QUALIFICATION

TILING AND DECORATIVE STONEWORK

LEVEL 1

FEBRUARY, 2025

LEVEL: 1 TILING AND DECORATIVE STONEWORK

Level: 1

SUMMARY: This qualification is for those interested in gaining level 1 trade competence in tiling and decorative stonework in furtherance of a career in the construction industry.

NSQ LEVEL: 1

TOTAL GUIDED LEARNING HOURS (GLH) REQUIRED: 180 Hours

Total learning hours 390 +		
Guided learning hours	Independent learning hours	Work-based learning hours
180	210	+

UNIT	UNIT REFERENCE	CREDIT	GLH	UNIT TITLE	REMARKS
01	CON/TL/001/L1	**2**	20	Health, Safety and Environment in Tiling and Decorative Stonework	Mandatory
02	CON/TL/002/L1	**2**	20	Communication Systems in a Work Environment	Mandatory
03	CON/TL/003/L1	**2**	20	Teamwork in a Work Environment	Mandatory
04	CON/TL/004/L1	**4**	40	Basic Tools, Equipment and Materials in tiling and decorative stonework	Mandatory
05	CON/TL/005/L1	**4**	40	Surface Preparation for Tiling and Stone Decoration Work	Mandatory
06	CON/TL/006/L1	**4**	40	Mix Preparation for Tiling and Stone Decoration Work	Mandatory

PURPOSE OF QUALIFICATION:

This qualification is for those interested in developing a career in the construction industry. To gain Level 1 qualification in Tiling and Decorative Stonework, learners must achieve 18 credits from the mandatory units.

NSQ LEVEL: 1

By the end of the level, the Learner should be able to:

1. Apply safe work practices and instructions
2. Demonstrate communication skills in a work environment
3. Depict Teamwork in a work environment
4. Use of basic hand tools and equipment in tiling and decorative stonework.
5. Use materials in tiling-and stonework installation work
6. Prepare surfaces for tiling and decorative stonework
7. Mix materials and adhesives for tiling and decorative stonework

Level assessment requirements/evidence requirements

1. Direct Observation (DO)
2. Question and answers (QA)
3. Witness Testimony (WT)
4. Personal statement (Reflective account) (PS

Unit 01: Health, Safety and Environment in Tiling and Decorative Stonework

Unit reference number: CON/TL/001/L1

NSQ level: 1
Credit value: 2
Guided learning hours: 20

Unit Purpose: The unit is designed to ensure that at the end, the candidate should be able to comply with Health, Safety and Environmental practices and procedures.

Objectives By completing this mandatory unit, the learner should be able to:

1. Demonstrate safe work practices and instructions.
2. Recognize the role of learners in maintaining personal health and hygiene.
3. Maintain a hygienic, safe and secured workplace.
4. Identify potential Hazards at workplace
5. *Prevent hazards at workplace*

Unit assessment requirements/evidence requirements

1. Direct Observation (DO)
2. Question and answers (QA)
3. Witness Testimony (WT)
4. Personal statement (Reflective account) (PS)

Unit 001: Health, Safety and environment in Tiling and Decorative Stonework

LO (Learning Outcome)	Performance Criteria		Evidence Type				Evidence Page No.			
LO 1: *Demonstrate safe work practices and instructions*	1.1	Wear clean, smart and Personal Protective Equipment (PPE).								
	1.2	Comply with health, safety and other relevant regulations and guidelines.								
	1.3	Report any cuts, bruises and wounds to personnel such as; • First Aiders • Supervisors/Managers • Health and Safety officers								
	1.4	Report any accident or near accident quickly and accurately to the personnel.								
LO 2 *Recognize the role of learner in maintaining personal health and hygiene*	2.1	State own responsibilit~~ies~~ under the health and safety Act.								
	2.2	State rules on hygiene that must be followed.								
	2.3	State the importance of using correct Personal Protective Equipment such as Head gear, Foot, Face & Eye, Hand, Body and Ear Protection.								
	2.4	State the importance of maintaining good personal hygiene.								
	2.5	Describe how to deal with cuts, bruises, and wounds and why it is important to do so.								
LO 3 Maintain a hygienic, safe and secure workplace	3.1	Comply with health, hygiene and safety procedures during work								
	3.2	Perform emergency procedures during work								
	3.3	Comply with organizational security procedures.								
	3.4	Carry out disposal of waste and pollution control using organic and inorganic waste disposal methods.								

LO 4 Identify potential hazards at workplace	4.1	Identify any hazards or potential hazards at workplace.								
	4.2	Describe the types of hazards in the workplace								
	4.3	State hazards that can be dealt with personally and those that should be reported to statutory authority.								
LO 5 *Prevent hazards in workplace.*	5.1	Describe how to warn other people about hazards and why this is important.								
	5.2	State why accidents and near accidents should be reported and who it should be reported to.								
	5.3	Describe the types of accidents that may happen								
	5.4	State where to find first aid items								
	5.5	State safe lifting and handling techniques that should be followed								
	5.6	Describe organizational emergency procedures								
	5.7	State the possible causes of fire in the workplace.								
	5.8	Describe how to minimize the possibility of fire in the workplace.								
	5.9	State where to find the alarms and how to set them off.								

Learner's Signature:	Date:
Assessor's Signature:	Date:
IQAM Signature (if sampled)	Date:
EQAM Signature (if sampled)	**Date:**

Unit 2: Communication Systems in a Work Environment

Unit reference number: CON/TL/002/L1
NQS level: 1
Credit value: 2
Guided learning hours: 20

Unit Purpose:

The unit is designed to ensure that an Assistant Tiler and Assistant Stonework Decorator work within the Tiling and Decorative Stonework environment, establish a quality communication system that is responsive and subject to change in meeting workers and employers need.

Objectives:

By completing this mandatory unit, learner should be able to:

1. Use non-complex communication systems in a work environment.
2. Identify the sources of information in a work environment.
3. Demonstrate the use of various means of communication in a work environment.

Unit assessment requirements/evidence requirements

1. Direct Observation (DO)
2. Question and answers (QA)
3. Witness Testimony (WT)
4. Personal statement (Reflective account) (PS)

Unit 2: Communication Systems in a Work Environment

LO (Learning Outcome)	Performance Criteria		Evidence Type				Evidence Page No.			
LO 1 Use a non-complex communication system in a work environment	1.1	Use simple verbal means to pass on information.								
	1.2	Use nonverbal means to pass on information e.g. Body Language.								
	1.3	Interpret symbols and signs.								
LO 2 Identify the source of information in a work environment	2.1	Locate the source of information in a work environment.								
	2.2	List the sources of information in a workplace								
	2.3	Identify sources of information.								
	2.4	List the communication equipment required in the work environment.								
	2.5	Follow procedure in reporting findings in in a work environment.								
LO 3 Demonstrate the use of various means of communication in a work environment	3.1	Use various information network flow systems in a work environment.								
	3.2	Use information to avoid challenges in a work environment.								
	3.3	Use effectively the various communication equipment in a work environment.								
	3.4	Pass information effectively to the right personnel.								
	3.5	Pass information effectively using symbols, signs and codes.								
	3.6	Follow channel of communication channels in line with ethics of the work environment.								

Learner's Signature:	Date:
Assessor's Signature:	Date:
IQAM Signature (if sampled)	Date:
EQAM Signature (if sampled)	**Date:**

Unit 3: Team Work in a Work Environment

Unit reference number: CON/TL/003/L1
NSQ level: 1
Credit value: 2
Guided learning hours: 20

Unit Purpose:

The purpose for this unit is educate the learner on how to apply knowledge, skills and understanding and the attitude required to develop team spirit and positive working relationship with colleagues in a work environment.

Objectives: By completing this mandatory unit, learner should be able to:

1. Demonstrate positive working relationships with co-workers
2. Take responsibility within the team.
3. Comply with policies of own organization.

Unit assessment requirements/evidence requirements

1. Direct Observation (DO)
2. Question and answers (QA)
3. Witness Testimony (WT)
4. Personal statement (Reflective account) (PS)

Unit 3: Teamwork in a Work Environment

LO (Learning Outcome)	Performance Criteria		Evidence Type				Evidence Page No.			
LO 1 Demonstrate positive working relationships with co-workers	1.1	State the need for developing positive working relationships with colleagues.								
	1.2	State the importance of relating with co-workers in a way that makes them feel valued and respected.								
	1.3	Assist team members as the need arose.								
	1.4	Identify the appropriate personnel when assistance is required in a work place. -								
	1.5	Pass information to colleagues about own work that might affect others.								
LO 2 Take responsibility within the team	2.1	State own roles and responsibilities within the team.								
	2.2	Perform individual tasks in line with the team's aspirations.								
	2.3	Participate actively in teamwork.								
LO 3 Comply with policies of own organization	3.1	Work in line with organizational Policies								
	3.2	List some of the organizational Policies in teamwork								
	3.3	Explain the importance of complying with the organization's policies .								

Learner's Signature:	Date:
Assessor's Signature:	Date:
IQAM Signature (if sampled)	Date:
EQAM Signature (if sampled)	**Date:**

Unit 4: Basic Tools, Equipment and Materials in Tiling and Decorative Stonework

Unit reference number: CON/TL/004/L1

NSQ level: 1

Credit value: 4

Guided learning hours: 40

Unit Purpose: The purpose for this unit is to ensure that the assistant tiler/decorative stone worker understands basic tools, equipment and materials used in tiling and stone decorative work.

Objectives: On completion of this mandatory unit, learners should be able to:

1. Identify various tools and equipment suitable for tiling and stone decorative works
2. Identify construction materials suitable for tiling and stone decorative works
3. Identify the Methods of Handling and Storing Materials and Tools for tiling and stone decorative works

Unit assessment requirements/evidence requirements

1. Direct Observation (DO)
2. Question and answers (QA)
3. Witness Testimony (WT)
4. Work Product (WP)
5. Personal statement (Reflective account) (PS)

Unit 4: Basic Tools, Equipment and Materials in Tiling and Decorative stonework

LO (Learning Outcome)	Performance Criteria		Evidence Type				Evidence Page No.			
LO 1.0 *Identify various tools and equipment suitable for tiling and stone decorative work*	1.1	List tools and equipment suitable for tiling and stone decorative work, such as trowel, straight edge, spirit level, foam, wooden float, mechanical tile cutter, glass cutter, measuring tape, mechanical compacting roller etc								
	1.2	Select tools and equipment suitable for tiling and stone decorative work, such as trowel, straight edge, spirit level, foam, wooden float, mechanical tile cutter, glass cutter, measuring tape, tile spacers, pinches, etc								
	1.3	Be able to identify and use the tools and equipment for tiling and stone decorative work.								
LO 2 *Identify construction materials suitable for tiling and stone decorative work*	2.1	List construction materials suitable for tiling and stone decorative works in both internal and external conditions e.g. • Adhesives • Aggregates of different grades • Ceramic wall/floor tiles of different sizes and colors • Mosaic decorative tiles • Terrazzo tile (precast & in-situ) • Marble tiles • PVC floor Tiles • Clean Water								
	2.2	Identify materials of construction suitable for								

		tiling and stone decorative works in both internal and external conditions e.g. • Adhesives • Aggregates of different grades • Ceramic wall/floor tiles of different sizes and colors • Mosaic decorative tiles • Terrazzo tile (precast & in-situ) • Marble tiles • PVC floor Tiles • Clean Water								
	2.3	Select materials suitable for tiling and stone decorative works in both internal and external conditions e.g. • Adhesives • Aggregates of different grades • Ceramic wall/floor tiles of different sizes and colors • Mosaic decorative tiles • Terrazzo tile (precast & in-situ) • Marble tiles • PVC floor Tiles • Clean Water								
LO 3: *Identify the Methods of Handling and Storing Materials and Tools for tiling and stone decorative work*	3.1	Describe how to handle tiling/stonework materials and tools.								
	3.2	Describe how to store tiling/stonework materials and tools.								
	3.3	Maintain tools and equipment used by Tilers and decorative stone workers.								

Learner's Signature:	Date:
Assessor's Signature:	Date:
IQAM Signature (if sampled)	Date:
EQAM Signature (if sampled)	**Date:**

Unit: 5 Surface Preparation for Tiling and Stone Decoration Work

Unit reference number: CON/TL/005/L1

NSQ level:	1
Credit value:	4
Guided learning hours:	40

Unit Purpose: This unit is designed to ensure that Assistant Tilers/Assistant Stone Decorators acquired the knowledge, skills and attitudes for surface preparation in tiling and decorative stonework.

Units Objectives

On completion of this mandatory unit, learners should be able to:

1. Prepare surfaces to receive tiles and stonework
2. Clean surfaces and tools for tiling and stone decoration works
3. Select tiles/stonework for surfaces.

Unit assessment requirements/evidence requirements

1. Direct Observation (DO)
2. Question and answers (QA)
3. Witness Testimony (WT)
4. Personal statement (Reflective account) (PS)

Unit: 5 Surface Preparation for Tiling and Stone Decoration Work

LO (Learning Outcome)	Performance Criteria		Evidence Type				Evidence Page No.			
LO 1 *Prepare surfaces to receive tiles and stonework*	1.1	Select tools and equipment for surface preparation.								
	1.2	Cut and chisel projected surfaces before placing decorative stonework/tiles								
	1.3	Fill the chiseled surfaces flush to receive tiles/stonework.								
	1.4	Compact finished surface with tools and equipment								
LO 2 *Clean surface to receive tiles/stonework*	2.1	Carefully select tools for cutting of tiles and stonework materials.								
	2.2	Remove debris away from site and clean site.								
	2.3	Dispose debris in an approved dump site.								
LO3: *Select tiles/ stone for surfaces.*	3.1	Identify the sizes and shapes of the tile and decorative stone.								
	3.2	Safely stockpile tiles and decorative stones in the work area.								
	3.3	Wet stone surfaces and soak tiles before laying in accordance with specifications.								

Learner's Signature:	Date:
Assessor's Signature:	Date:
IQAM Signature (if sampled)	Date:
EQAM Signature (if sampled)	**Date:**

Unit 6: Mix Preparation

Unit reference number: CON/TL/006/L1

NSQ level:	1
Credit value:	4
Guided learning hours:	40

Unit Purpose: The unit is designed to acquire the knowledge, skills and attitudes on selection of materials and approved mix ratios and methods for laying of tiles and decorative stones.

Unit Objectives

On completion of this mandatory unit, learner should be able to:

1. Select materials and mix using approved methods for tiling and stone decorative work
2. Select tools for mixing materials for tiling and stone decorative work
3. Mix adhesives according to approved specification.

Unit assessment requirements/evidence requirements

1. Direct Observation (DO)
2. Question and answers (QA)
3. Witness Testimony (WT)
4. Personal statement (Reflective account) (PS)

Unit 6: Mix Preparations

LO (Learning Outcome)	Performance Criteria		Evidence Type				Evidence Page No.			
LO1: Select materials and mix design for laying of tiles and decorative stone work.	1.1	Identify and select materials for mixing of adhesives for laying of tiies and decorative stone work such as:- i) Cement only ii) Cement : Sand iii) White Cement iv) PVC Adhesives								
	1.2	Select different materials for mixing adhesives for tiling and stone decorative work such as:- i) Cement only ii) Cement : Sand iii) White Cement iv) PVC Adhesives								
	1.3	Prepare mixing platform by removing dirt with shovel or broom as appropriate.								
LO2: Select tools for mixing materials for tiling and stone decorative work	1.1	Select tools for mixing different adhesives for tiling and stone decorative work.								
	1.2	Use tools and mix different adhesives for tiling and stone decorative work								
	1.3	Properly Clean and store tools after each days' work								
LO 3: Mix adhesives according to approved specification	2.1	Use various batching methods for mixing materials as follows: • by normal measuring device (volume) e.g. Guage Box, Head pan, Bucket, Wheelbarrow etc • by comparing weighing scales								
	2.2	Mix cement sand screed by manual method								
	2.3	Mix cement sand screed by mechanical method.								
	2.4	Mix Ordinary Portland cement/white cement for grouting in accordance with standard specifications.								

Learner's Signature:	Date:
Assessor's Signature:	Date:
IQAM Signature (if sampled)	Date:
EQAM Signature (if sampled)	**Date:**

NATIONAL SKILLS QUALIFICATION

TILING AND DECORATIVE STONEWORK

LEVEL 2

FEBRUARY, 2025

LEVEL 2: TILING AND DECORATIVE STONEWORK

SUMMARY This qualification is designed to prepare learner to be interested in achieving level 2 qualification in tiling/decorative stonework as well as developing a career in the building construction industry with adequate knowledge, attitude and skills of tiling/stone decorative works

NSQ LEVEL: 2

TOTAL GUIDED LEARNING HOURS REQUIRED: Hours 260

Total learning hours: 590 +		
Guided learning hours	Independent learning hours	Work-based learning hours
260	330	+

UNIT	UNIT REFERENCE	CREDIT	GLH	UNIT TITLE	REMARKS
01	CON/TL/001/L2	**2**	20	Health, Safety and Environment Practices in work environment.	Mandatory
02	CON/TL/002/L2	**2**	20	Communication System in a Work Environment	Mandatory
03	CON/TL/003/L2	**2**	20	Teamwork in a Work Environment	Mandatory
04	CON/TL/004/L2	**3**	30	Interpret Information on tile/stone work	Mandatory
05	CON/TL/005/L2	**2**	20	Erecti~~o~~n and dismantling of scaffolds, working platforms and ladders at the workplace	Mandatory
06	CON/TL/006/L2	**3**	30	Preparations for laying of Wall/Floor tiles.	Mandatory
07	CON/TL/007/L2	**4**	40	Set Out and Fix Tiles to wall/floor Surfaces	Mandatory
08	CON/TL/008/L2	**4**	40	Set out and Lay decorative stone on wall/floor surfaces.	Mandatory
09	CON/TL/009/L2	**4**	40	Prepare floor surface for cement, sand and chippings or granite Mix for terrazzo flooring .	Mandatory

PURPOSE OF QUALIFICATION:

This qualification is for those interested in developing a career in the construction-industry. In order to achieve Level 2 qualification in Tiling and Decorative Stonework. Learners must achieve 26 credits from the mandatory units.

TITLE LEVEL 2: TILING AND DECORATIVE STONEWORK

Unit 01: Health, Safety and Environment

Unit reference number: CON/TL/001/L2
NSQ level: 2
Credit value: 2
Guided learning hours: 20

Unit Purpose: This unit is designed to ensure that by the end of the exercise, the candidate is able to comply with Health, Safety and Environment practices and procedures in accordance with standard procedures, rules and regulations.

Objectives By completing this mandatory unit, the learner must show competence in:

1. *Health, Safety and Welfare measures on construction sites*
2. *Demonstrate the use of personal protective gears on construction sites*
3. *Demonstrates safety considerations on construction site*

Unit assessment requirements/evidence requirements

b. Direct Observation (DO)
c. Question and answers (QA)
d. Witness Testimony (WT)
e. Personal statement (Reflective account) (PS)

Unit 001: Health, Safety and Environment

LO (Learning Outcome)	Performance Criteria		Evidence Type				Evidence Page No.			
LO 1: *Recognize health, safety and welfare measures on construction sites*	1.1	Explain health, safety and environment relating to tiling and stone decorative work								
	1.2	Comply with health and safety regulations relating to tiling and stone decorative work								
	1.3	Carry out activities in a safe and responsible manner in accordance with legislative, ~~official guidance~~ and manufacturer's instruction.								
	1.4	~~Communicate~~ Recognize health and safety issues relevant to tiling and stone decorative work								
	1.5	Demonstrate how to report accidents and emergencies to appropriate personnel such as; • First Aiders • Supervisors/Managers • Health and Safety workers								
LO2 *Demonstrate the use of personal protective gears on construction sites*	2.1	Use clean and smart ~~and appropriate~~ PPE								
	2.2	Report accidents and emergencies to ~~appropriate~~ personnel such as; • First Aiders • Supervisors/Managers • Health and Safety workers								
	2.3	Clean and store PPE appropriately after use								
LO3 *Demonstrate safety considerations on construction site*	2.1	Identify the locat~~ion~~ of the first aid box on site.								
	2.2	Describe and give examples of key accidents, trends, causes and prevention on site.								
	2.3	Explain health and safety considerations involved in tiling and stone decorative ~~projects~~ work.								

Learner's Signature:	Date:
Assessor's Signature:	Date:
IQAM Signature (if sampled)	Date:
EQAM Signature (if sampled)	**Date:**

Unit 2: Communication Systems in a Work Environment

Unit reference number: CON/TL/002/L2
NSQ level: 2
Credit value: 2
Guided learning hours: 20

Unit Purpose:

The unit is designed to ensure that Tiler or Stonework Decorator operates and work within the Tiling and Decorative Stonework environment, establish a quality communication system that is responsive in meeting workers and employers' needs.

Objectives: By completing this mandatory unit, learners should be able to:

1. Use non-complex communication system in a work environment
2. Identify sources of information in a work environment
3. *Demonstrate the use of various communication means in a work environment*

Unit assessment requirements/evidence requirements

1. Direct Observation (DO)
2. Question and answers (QA)
3. Witness Testimony (WT)
4. Personal statement (Reflective account) (PS)

Unit: II Communication System in a Work Environment

LO (Learning Outcome)	Performance Criteria		Evidence Type				Evidence Page No.			
LO 1 Use non-complex communication systems in a work environment	1.1	Use simple verbal means to pass on ~~necessary~~ information.								
	1.2	Use nonverbal means to pass on necessary information e.g. Body Language.								
	1.3	Interpret symbols and signs in accordance with instructions.								
LO 2 Identify sources of information in a work environment	2.1	Locate the sources of information in an organization ~~and work environment~~.								
	2.2	Recognize the sources of information in a workplace.								
	2.3	Use various information flow systems in a work environment.								
	2.4	Use information to avoid challenges in a work situation.								
	2.5	~~Report~~ Implement findings in accordance with procedure in a work environment.								
LO 3 *Demonstrate the use of various communication means in a work environment*	3.1	~~Locate~~ Recognize the various communication equipment in the work environment								
	3.2	Use ~~effectively~~ the various communication equipment in a work environment in accordance specifications. .								
	3.3	Pass information ~~effectively~~ to the right personnel in accordance with instructions.								
	3.4	Pass information using symbols, signs and codes.								

	3.5	Select instructions in line with ethics of the work environment.								

Learner's Signature:	Date:
Assessor's Signature:	Date:
IQAM Signature (if sampled)	Date:
EQAM Signature (if sampled)	**Date:**

Unit 3: Teamwork in a work environment

Unit reference number: CON/TL/003/L2

NSQ level:	2
Credit value:	2
Guided learning hours:	20

Unit Purpose: The purpose for this unit is to impact to the learner skills, knowledge and understanding required to develop team spirit and positive working relationship with colleagues.

Objective: On completion of this unit, the learner should be able to:

1. Develop a Positive working relationship with colleagues
2. Take responsibility within the team
3. Comply with policy of organization

Unit assessment requirements/evidence requirements

i. Direct Observation (DO)
ii. Question and answers (QA)
iii. Witness Testimony (WT)
iv. Personal statement (Reflective account) (PS)

Unit 3: Teamwork

LO (Learning Outcome)	Performance Criteria		Evidence Type				Evidence Page No.			
LO 1 Develop a Positive working relationship with colleagues	1.1	Recognize the need for positive working relationships with colleagues.								
	1.2	Explain the importance of relating with other people in a way that makes them feel valued and respected.								
	1.3	Use team members when required.								
	1.4	Recognize the personnel when request for assistance.								
	1.5	Explain information to colleagues about own work that might affect others.								
LO 2 Take responsibility within the team	2.1	Recognize own role and responsibility within the team.								
	2.2	Perform individual tasks in line with the team rules and regulations.								
	2.3	Carry out ~~in~~ teamwork in accordance with instructions.								
LO 3 Comply with policy of organization	3.1	~~Work~~ Implement in line with organizational policy								
	3.2	Use organization code of practice.								
	3.3	Explain the organizational code of conduct.								

Learner's Signature:	Date:
Assessor's Signature:	Date:
IQAM Signature (if sampled)	Date:
EQAM Signature (if sampled)	**Date:**

Unit 4: Interpret Information on Tile/Stone Work

Unit reference number: CON/TL/004/L2

NSQ level:	2
Credit value:	3
Guided learning hours:	30

Unit Purpose: The purpose for this unit is to ensure that the ~~assistant~~ tiler/stone decorator understands the interpretation of working drawings in relation to tiles or stone laid surface in line with job specifications.

Objectives On completion of this mandatory unit, learner should be able to:

1. Interpret Information on surfaces to be tiled/laid with stone
2. Carryout tiling and stone decorative work using hand tools, power tools and scaffolds
3. Set out areas to be tiled or stone laid

Unit assessment requirements/evidence requirements

1 Direct Observation (DO)
2 Question and answers (QA)
3 Witness Testimony (WT)
4 Work Product (WP)
5 Personal statement (Reflective account) (PS)

Unit 4: Interpret Information on tile/stone work

LO (Learning Outcome)	Performance Criteria		Evidence Type				Evidence Page No.			
LO 1 *Interpret Information on surfaces to be tiled/laid with stone.*	1.1	Explain the use of specifications on tile/stonework								
	1.2	Interpret tiling/stonework working drawings								
	1.3	Measure the area (Square Meters) of surfaces to be tiled/laid with stonework from the working drawings								
LO 2 *Carryout tiling and stone decorative work using hand tools, power tools and scaffolds*	2.1	Select tools for tiling and stone decorative work such as: - • Trowel • Spirit Level • Straight Edge • Line • Portable electric saw machine and drills • Standard Manual Tile Cutter • Light tile cutter (glass or diamond cutter) • Tile Spacers • Measuring tape • Pinches • Rubber/Wooden Mallet • Laser leveling and measuring tools • Stone clamps • Stone trimming hammer • Scrapper • Compacting rammers • Concrete/mortar mixers.								
	2.2	Use the required hand tools ~~suitable~~ for tiling and stone decorative work.								
	2.3	Use the required power tools ~~suitable~~ for tiling and stone decorative work.								
LO 3 *Set out areas to be tiled or stone laid*	3.1	Use ~~measuring~~ the required tools to measure and take levels for tiling/stonework								

	3.2	Use the required tools to set out measured surfaces to be tiled/laid with stone								
	3.3	Prepare Mortar with smooth sand & Lime or cement								
	3.4	Describe tiles/stonework on surfaces in line with specifications.								
	3.5	Carry out gauge & alignment in accordance with specifications								
	3.6	Carry out housekeeping on site in accordance with instructions.								

Learner's Signature:	Date:
Assessor's Signature:	Date:
IQAM Signature (if sampled)	Date:
EQAM Signature (if sampled)	**Date:**

Unit 05

Unit Title: Erecting and dismantling of scaffolds, working platforms and ladders at the workplace

Unit Reference Number: CON/TL/05/L2

NSQ level:	2
Credit value:	2
Guided learning hours:	20

Unit Purpose: The learner should be able to acquire ~~proficient~~ knowledge, attitudes and skills in erecting and dismantling scaffolds, work platforms and ladders, at workplace environment

Objectives:

1. Erect scaffolds, working platforms and ladders at work place.
2. Dismantle scaffold, working platforms and ladders at the workplace.
3. Store appropriately dismantled scaffold.

Unit Assessment Requirements / Evidence Requirements

1. Direct Observation (DO)
2. Question and Answers (QA)
3. Work product (WP)
4. Witness Testimony (WT)
5. Personal statement (PS)

Unit: 5 Erection and dismantling of scaffolds, working platforms and ladders at the workplace

LO (Learning Outcome)	Performance Criteria		Evidence Type				Evidence Page No.			
LO 1 *Erect scaffold, working platforms and ladders at work place.*	1.1	Identify the types and quantity of materials required for erecting a particular scaffold, working platforms and ladders at the workplace								
	1.2	Use the required tools and equipment for erecting various scaffold/working platform/ladder in accordance with specifications.								
	1.3	Use scaffolding materials to and from site in accordance with instructions.								
	1.4	Recognize the hazard and risk in erecting of scaffold, platform and ladders.								
	1.5	Assemblebase for scaffold and ladders and erect scaffold in accordance with instructions								
LO 2 *Dismantle scaffolds, working platforms and ladders at the workplace*	2.1	Select the required tools and equipment to dismantle various scaffold/working platform/ladder at the workplace.								
	2.2	Identify hazard and risk in dismantling of scaffold platform and ladders								
	2.3	Dismantle scaffold, platforms and ladders, in accordance with specified guidelines.								
LO 3 *Store appropriately dismantled scaffold.*	3.1	Maintain dismantled scaffold materials in accordance with instructions.								
	3.2	Dismantled scaffold component in								

		accordance with instructions.								
	3.3	Dispose defective scaffold materials in accordance with instructions.								

Learner's Signature:	Date:
Assessor's Signature:	Date:
IQAM Signature (if sampled)	Date:
EQAM Signature (if sampled)	**Date:**

Unit 6: Preparation for Tiling and Stonework on Wall/Floor surfaces

Unit reference number: CON/TL/006/L2

NSQ level:	2
Credit value:	3
Guided learning hours:	30

Unit Purpose: This unit is designed to ensure that Tilers or Stone Decorators are equipped with the requisite knowledge, skills and attitudes of preparing wall and floor surfaces for tiling/stonework.

Unit Objectives:

1. Prepare wall surface for tiling and stonework
2. Select equipment for tiling and stonework for large/wide areas
3. Carry out tiles/stonework according to specifications

Unit assessment requirements/evidence requirements

In this unit, Tilers/Stone decorators need to show evidence of competence in the identified performance criteria by achieving the mandatory units of the qualification**.**

1. Direct Observation (DO)
2. Question and answers (QA)
3. Witness Testimony (WT)
4. Work Product (WP)
5. Personal statement (Reflective account) (PS)

Unit: 6 Preparation for Tiling and Stone on Wall/Floor surfaces

LO (Learning Outcome)	Performance Criteria		Evidence Type				Evidence Page No.			
LO1: *Prepare wall surface for tiling and stone laying*	1.1	Prepare surfaces for wall /floor tiling and stone laying in accordance with specifications								
	1.2	Select tools and equipment for surface preparation.								
	1.3	Prepare surfaces before placing decorative stonework/tiles								
LO 2: *Select equipment for tiling and stonework for large/wide areas.*	2.1	Select equipment and tools required for tiling and stonework including: i. Leveling Instrument ii. Compacting rammers (Manual/ Mechanical) iii. Concrete / Mortar mixer iv. Mechanical tile Cutter v. Portable electric saw etc								
	2.2	Use tools and equipment for tiling and decorative stonework								
	2.3	Maintain equipment at the end of each workday.								
LO 3 *Cut tiles/stone according to specification*	3.1	Carry out tiles/stone to flush with openings								
	3.2	Describe fractional tiles/stones as measured to fit to corners and edges								
	3.3	Cut tiles/stones to size around electrical/plumbing fittings								
	3.4	Construct tiles/stonework for dedo and skirting								

Learner's Signature:	Date:
Assessor's Signature:	Date:
IQAM Signature (if sampled)	Date:
EQAM Signature (if sampled)	**Date:**

Unit: 7 Set Out and Fix Tiles to Wall/floor Surface

Unit reference number: CON/TL/007/L2

NSQ level:	2
Credit value:	4
Guided learning hours:	40

Unit Purpose: This unit is designed to ensure that Tilers are equipped with knowledge, attitudes and skills to interpret drawings, set out and fix tiles to wall/floor surfaces

Objectives:

On completion of this mandatory unit, Tilers should be able to:

1. Read drawings and estimate materials
2. Measure the quantity of tiles/stonework required for a given areas.
3. Measure and set out wall/floor surfaces
4. Construct Tiles on wall/floor surfaces
5. Carry out tiling joints with suitable adhesives
6. Tile internal Corners
7. Tile external corners
8. Set and lay Glass Blocks
9. Set and lay mosaic tiles

Unit assessment requirements/evidence requirements

1. Direct Observation (DO)
2. Question and answers (QA)
3. Witness Testimony (WT)
4. Work Product (WP)
5. Personal statement (Reflective account) (PS)

Unit 7: Set Out and Fix Tiles to Wall/Floor Surfaces

LO (Learning Outcome)	Performance Criteria		Evidence Type				Evidence Page No.			
LO 1 *Interprets working drawings to provide the materials and cost estimates.*	1.1	Measure the tile area (square meter) from the working drawings								
	1.2	Describe the number of tiles required to cover one square meter								
	1.3	State the number of tiles per carton of different sizes								
LO 2 *Determine the quantity of tile required by calculations for the areas to be covered*	2.1	Measure surface areas of different shapes and sizes to be tiled								
	2.2	Use the number of tiles required to cover one meter square								
	2.3	Use the quantity of tile sizes that will cover a given surface area								
	2.4	State the number of tile cartons required for given surface area.								
LO 3 *Measure and set out wall/floor surfaces*	3.1	Read and interpret working drawings of a simple building project.								
	3.2	Use instruments to measure various linear dimensions								
	3.3	Measure internal/external surfaces								
	3.4	Select an area for tiling from an internal wall/floor surface e.g kitchen.								
	3.5	Measure the length and height of the wall to be tiled								
LO 4 *Fix Tiles on wall/floor surfaces*	4.1	Determine the line of symmetry, start tiling from there and move both ways								
	4.2	Mix adhesive materials in accordance with specifications.								
	4.3	Select the tiles for the work.								

	4.4	Soak the tiles in water for the required duration of time								
	4.5	Remove the tiles from water and allow it to drain								
	4.6	Apply mortar evenly on the unglazed side of the tiles								
	4.7	Set the tiles in position and tap gently with mallet								
	4.8	Use spirit level to check vertical and horizontal plumb respectively								
	4.9	Reconcile tile level gauge in line with the specifications								
LO 5 *Fill tiling joints with suitable adhesives*	5.1	Mix the required ratio of adhesives e.g. white cement, OPC etc								
	5.2	Apply adhesives ~~into the~~ joints to flush with tile surface laid								
	5.3	Clean the tile surface with suitable cleaner								
LO 6 *Tile laying of internal Corners*	6.1	Set tiles from the middle towards the corner; and check if the last one at the corner is fully tiled								
	6.2	Apply adhesive on the last corner tile and set it to position.								
	6.3	Use square to confirm the angle if it is 90" and check if the corner tile is fractional								
	6.4	Measure the size on the tile mark and cut the tile according to the size								
	6.5	Apply adhesive on the tile and fix it to the surface								
LO 7 *Tile laying of external corners*	7.1	Set tiles from the middle towards the corner; and check if the last one at the corner is fully tiled								
	7.2	Apply adhesive on the last corner tile and set it to position.								
	7.3	Use square to confirm the angle if it is 90" and check								

		if the corner tile is fractional								
	7.4	Measure the size on the tile mark and cut the tile according to the size								
	7.5	Apply adhesive on the tile and fix it to the surface								
LO 8 *Set and lay Glass Blocks*	8.1	Identify the areas to lay glass block								
	8.2	Measure the area to lay glass blocks on site								
	8.3	Calculate the area of glass block required in square meters (m^2)								
	8.4	Set and level first course of blocks								
	8.5	Use adhesive to bind set blocks								
	8.6	Lay glass blocks and ensure alignment (vertical and horizontal)								
	8.7	Clean the surface using water or other recommended chemicals								
LO 9 *Set and lay mosaic tiles*	9.1	Select tools such as: • Utility knife • Measuring tape • Notched trowel • Tile saw • Tile Nippers • Margin trowel • Drill • Pencil • Floating board etc.								
	9.2	Select appropriate bonding materials/adhesives								
	9.3	Dry lift the tiles and center the design								
	9.4	Fix mosaic to required position using bonding agents								

Learner's Signature:	Date:
Assessor's Signature:	Date:
IQAM Signature (if sampled)	Date:
EQAM Signature (if sampled)	**Date:**

Unit 8: Set Out and Lay Stone Floor Surface

Unit reference number: CON/TL/008/L2

NSQ level:	2
Credit value:	4
Guided learning hours:	40

Unit Purpose: This unit is designed to ensure that Tilers or Stone Decorators are equipped with knowledge and skills of setting out and laying stones on floor surfaces.

Unit Objectives: On completion of this mandatory unit, the learner should be able to:

1. *Set out surfaces to receive stones*
2. *Calculate quantity of stones required*
3. *Cut stone according to site requirements*
4. *Select adhesives to be used according to specifications and conditions*
5. *Lay stones to specification*

Unit assessment requirements/evidence requirements

1.Direct Observation (DO)
2. Question and answers (QA)
3.Witness Testimony (WT)
4.Work Product (WP)
5.Personal statement (Reflective account) (PS)

Unit 8: Set Out and Lay Stone on wall/floor Surfaces

LO (Learning Outcome)	Performance Criteria		Evidence Type				Evidence Page No.			
LO1: *Set out surfaces to receive stones*	1.1	Identify the areas to be laid with stone from the working drawing								
	1.2	Measure the area to be laid with stone								
	1.3	Set out the surface using tools in accordance with instructions.								
LO 2 *Calculate the quantity of stones required*	2.1	Measure the dimensions of surface to be laid with stone								
	2.2	Calculate the surface areas to be stoned in square meter (m2)								
	2.3	Determine the quantity of stones required for the calculated area								
LO 3: *Cut stones according to site requirements*	3.1	Select manual cutting tools e.g Diamond tile cutter/stone chipping hammer								
	3.2	Place the straight edge or square on the tile/stone along the marked line and use the appropriate tool to cut								
	3.3	Cut fractional tiles/stone of different sizes e.g. 50mm, 75mm, 80mm etc								
LO 4: *Select adhesives to be used according to specifications and conditions*	4.1	Select adhesive for stone work								
	4.2	Use adhesive for stones work								
	4.3	Use cement mixes according to the conditions e.g Damp areas will require harder mixes; dry areas will require lighter mixes								
LO 5: *Lay stones to specification*	5.1	Prepare a screed bed to receive stones								
	5.2	Lay stone from center to run either direction and ensure alignment								
	5.3	Use the straight edge, line and level to check alignment								
	5.4	Fill the joints with appropriate cement and clean the surface								

Learner's Signature:	Date:
Assessor's Signature:	Date:
IQAM Signature (if sampled)	Date:
EQAM Signature (if sampled)	**Date:**

Unit 9: Forming Sand & Cement, Cement & Chippings or Granite Mix for terrazzo flooring.

Unit reference number: CON/TL/009/L2

NSQ level:	2
Credit value:	4
Guided learning hours:	40

Unit Purpose: This unit is designed to ensure that Tiler or Stone Decorator is equipped with knowledge and skills of forming Sand & cement, cement & chippings or granite mix for terrazzo flooring

Objective:
On completion of this mandatory unit, the learner should be able to:

1. *Select tools/equipment and materials for terrazzo work*
2. *Place floor screeds to level*
3. *Cast and Polish Terrazzo*

Unit assessment requirements/evidence requirements

1. Direct Observation (DO)
2. Question and answers (QA)
3. Witness Testimony (WT)
4. Work Product (WP)
5. Personal statement (Reflective account) (PS)

Unit: 9 Forming Sand & Cement, Cement & Chippings or Granite Mix for terrazzo flooring.

LO (Learning Outcome)	Performance Criteria		Evidence Type				Evidence Page No.			
LO 1 *Select tools/equipment and materials for terrazzo work*	1.1	Select hand tools and power tools suitable for terrazzo work such as: • Trowel • Spirit Level • Straight Edge • Line • roller and compactor • Concrete Mixer • Metal Square • Hack saw • Washing machine								
	1.2	Select appropriate materials suitable for terrazzo								
	1.3	Use tools and equipment suitable for terrazzo work								
LO 2 *Place floor screeds to level*	2.1	Prepare the floor surface, to receive ebonite strip								
	2.2	Divide the area into panels or Bays using ebonite strips suitable for terrazzo thickness								
	2.3	Measure sand and cement according to specified ratio								
	2.4	Mix sand and cement with water to requirement								
	2.5	Mix and spread the screed into each panel, level and compact to float								
LO 3 *Cast and Polish Terrazzo*	3.1	Bed ebonite strips according to the design panels with mortar								
	3.2	Cure the mortar for at least 24 hours								
	3.3	Measure cement and granite according to the specified ratio								
	3.4	Mix and spread the granite paste into each bay								
	3.5	Level and compact to float with roller								
	3.6	Cure the surface after it has hardened in at least 24 hours								
	3.7	Continue curing up to maximum of 28 days								
	3.8	Grind the surface								
	3.9	Polish the surface								

Learner's Signature:	Date:
Assessor's Signature:	Date:
IQAM Signature (if sampled)	Date:
EQAM Signature (if sampled)	**Date:**

NATIONAL SKILLS QUALIFICATION

TILING AND DECORATIVE STONEWORK

LEVEL 3

FEBRUARY, 2025

PURPOSE OF QUALIFICATION:

This qualification is for those interested in developing a career in the construction industry. To gain Level 3 qualification in Tiling and Decorative Stonework, learners must achieve 39 credits from the mandatory unit.

LEVEL 3 TILING AND DECORATIVE STONEWORK

SUMMARY: This qualification is for those interested in attaining master craftsmanship level in Tiling and Decorative Stonework in the building construction industry.

NSQ LEVEL 3

TOTAL GUIDED LEARNING HOURS REQUIRED: Hours 390

Guided learning hours: 390

Total learning hours 915 +		
Guided learning hours	Independent learning hours	Work-based learning hours
390	525	+

UNIT	UNIT REFERENCE	CREDIT	GLH	UNIT TITLE	REMARKS
01	CON/TL/001/L3	**2**	20	Health, Safety and Environment in Tiling and Decorative Stonework	Mandatory
02	CON/TL/002/L3	**2**	20	Communication System in a Work Environment	Mandatory
03	CON/TL/003/L3	**3**	30	Teamwork	Mandatory
04	CON/TL/004/L3	**4**	40	Math skills in tiling/stonework	Mandatory
05	CON/TL/005/L3	**4**	40	Estimating in tiling/stonework	Mandatory
06	CON/TL/006/L3	**4**	40	Lay Wall and Floor tiles	Mandatory
07	CON/TL/007/L3	**4**	40	Lay and install tiles to internal and external corners	Mandatory
08	CON/TL/008/L3	**4**	40	Lay Tile on Curved Surfaces	Mandatory
09	CON/TL/009/L3	**4**	40	Stone works	Mandatory
10	CON/TL/010/L3	**4**	40	Repair of tile/stonework	Mandatory
11	CON/TL/010/L3	**4**	40	Project planning	Mandatory

Unit 01: Health, Safety and Environment in Tiling and Decorative Stonework

Unit reference number: CON/TL/001/L3

NSQ level: 3
Credit value: 2
Guided learning hours: 20

Unit Objective On completion of this mandatory unit, the learner should be able to:

1. Execute health, safety, and welfare measures on construction sites applicable to tiling/stone decorative work
2. Demonstrate the use of personal protective gears
3. Ensure personal health and hygiene
4. Ensure a hygienic, safe and secured workplace
5. Prevent hazards and maintain safe & secured workplace

Unit assessment requirements/evidence requirements

1. Direct Observation (DO)
2. Question and answers (QA)
3. Witness Testimony (WT)
5. Work Product (WP)
6. Personal statement (Reflective account) (PS)

Unit 1: Health, Safety and Environment in Tiling and Decorative Stonework

LO (Learning Outcome)	Performance Criteria		Evidence Type				Evidence Page No.			
LO 1: *Execute health, safety, and Environment on construction sites applicable to tiling/stone decorative works*	1.1	Identify health, safety and welfare measures in construction sites relating to tiling and stone decorative works								
	1.2	Apply health and safety regulations relating to tiling/stone decorative works.								
	1.3	Carry out activities in a safe and responsible manner in accordance with standard guidance and manufacturer's instruction.								
	1.4	Demonstrate how to report accidents and emergencies to appropriate personnel such as; • First Aiders • Supervisors/Managers • Health and Safety workers								
LO2 *Demonstrate the use of personal protective gears*	2.1	Use clean and smart PPE in accordance with instructions.								
	2.2	Report accidents and emergencies to personnel such as; • First Aiders • Supervisors/Managers • Health and Safety workers								
	2.3	Clean and store PPE appropriately after use								
LO 3 *Ensure personal health and hygiene*	3.1	Summarize own responsibility under the health and safety Act as it relates to own occupation								
	3.2	State ~~general~~ rules on hygiene that must be followed.								
	3.3	Identify the use of Personal Protection Equipment such as Head, Foot, Face & Eye, Hand, and Body protection gears among team members.								

	3.4	Explain the importance of maintaining good personal hygiene.								
	3.5	Describe how to deal with cuts, bruises, and wounds and why it is important to do so.								
LO 4 *Ensure a hygienic, safe and secure workplace*	4.1	State the importance of working in a healthy, safe and hygienic workplace .								
	4.2	Report any accident or near accident quickly and accurately to the authorized person.								
	4.3	Follow health, hygiene and safety procedures during work.								
	4.4	Describe emergency procedures during work								
	4.5	Follow organizational security procedures.								
	4.6	Use disposal of waste and pollution control with organic and inorganic waste disposal methods.								
	4.7	Recognize sound/ noise control and protection methods and guidelines.								
LO 5 *Prevent hazards and maintain safe & secure workplace.*	5.1	Identify any hazards or potential hazards and deal with it.								
	5.2	Describe the types of hazards in the workplace that may occur and how to deal with them.								
	5.3	Monitor safe lifting and handling techniques that should be followed								
	5.4	State ways of working safely that are relevant to own position and why they are important								
	5.5	Analyze organizational emergency procedures and how it should be adhered strictly to								
	5.6	State the possible causes of fire in the workplace.								

	5.7	Describe how to minimize the possibility of fire in the workplace.								
	5.8	Describe organizational security procedures and why these are important.								
	5.9	Describe the importance of reporting all usual and non-routine incidents to the appropriate personnel.								

Learner's Signature:	Date:
Assessor's Signature:	Date:
IQAM Signature (if sampled)	Date:
EQAM Signature (if sampled)	**Date:**

Unit 2: Communication Systems in a Work Environment

Unit reference number: CON/TL/002/L3
NSQ level: 3
Credit value: 2
Guided learning hours: 20

Unit Purpose: Establish quality communication systems that are responsive and reflective in meeting workers and employers' need in work environments.

Objective: On Completion of this mandatory unit, the learner should be able to show level of competence in:

1. Using a complex communication system in a work environment
2. *Supervising the use of various information sources in a work environment*
3. *Demonstrating the use of various means of communication in a work environment*

Unit assessment requirements/evidence requirements

1. Direct Observation (DO)
2. Question and answers (QA)
3. Witness Testimony (WT)
4. Personal statement (Reflective account) (PS)

Unit: 2 Communication Systems in a Work Environment

LO (Learning Outcome)	Performance Criteria		Evidence Type				Evidence Page No.			
LO 1 Use complex communication systems in a work environment	1.1	Use verbal means to pass on necessary information.								
	1.2	Use written means to pass necessary information such as quotation, specifications, request for approvals etc.								
	1.3	Interpret symbols and signs appropriately.								
LO 2 *Supervise the use of various information sources in a work environment*	2.1	Locate the source of information in the work environment								
	2.2	Monitor the use of various information flow systems in a work environment.								
	2.3	Use instructions in line with ethics of the work environment.								
LO 3 *Demonstrate the use of various means of communication in a work environment*	3.1	Observe the various communication equipment in the work environment								
	3.2	Use the various communication equipment in a work environment in accordance with instructions.								
	3.3	Pass information to the right personnel in accordance with instructions.								
	3.4	Pass information using symbols, signs and codes.								
	3.5	Recognize instructions in line with ethics of the work environment.								

Learner's Signature:	Date:
Assessor's Signature:	Date:
IQAM Signature (if sampled)	Date:
EQAM Signature (if sampled)	**Date:**

Unit 3: Teamwork

Unit reference number: CON/TL/003/L3

NSQ level:	3
Credit value:	3
Guided learning hours:	30

Unit Purpose: The purpose for this unit is to impact on the learner, knowledge, skills and understanding, required to develop team spirit and positive working relationship with colleagues.

Objective: On completion of this mandatory unit, the learner should be able to show level of competence in:

1. *Developing Positive working relationships with colleagues*
2. *Taking responsibilities within the team*
3. *Complying with policy of organization.*

Unit assessment requirements/evidence requirements

1. Direct Observation (DO)
2. Question and answers (QA)
3. Witness Testimony (WT)
4. Personal statement (Reflective account) (PS)

Unit: 3 Teamwork

LO (Learning Outcome)	Performance Criteria		Evidence Type				Evidence Page No.			
LO 1 *Develop Positive working relationship with colleagues*	1.1	Explain the importance of positive working relationships with colleagues.								
	1.2	Monitor team members in accordance with instructions.								
	1.3	Report to the-personnel request for assistance in accordance with instructions.								
	1.4	Communicate with colleagues about own work that might affect others.								
LO 2 *Take responsibilities within the team*	2.1	Explain own role and responsibilities within the team.								
	2.2	Perform individual tasks in line with the team rules and regulations.								
	2.3	Supervise team members in accordance with instructions.								
LO 3 *Comply with policy of organization.*	3.1	Identify rules from code of conduct relevant to own trade area								
	3.2	Investigate in line with organizational policy								
	3.3	Observe organizational code of conduct.								

Learner's Signature:	Date:
Assessor's Signature:	Date:
IQAM Signature (if sampled)	Date:
EQAM Signature (if sampled)	**Date:**

Unit 4: Mathematics Skills in Tiling/Decorative Stonework

Unit reference number: CON/TL/04/L3

NSQ level:	3
Credit value:	4
Guided learning hours:	40

Unit Purpose: The purpose of this unit is to impact on the learner, knowledge and skills required by an individual to be proficient in mathematics, relevant to tiling/decorative stone work in the construction industry

Objective: On completion of this mandatory unit, the learner should have competency to:

1. *Analyze drawings with mathematical method*
2. *Determine angles when cutting tiles according to the size of the angle*
3. *Calculate surface area of floors and walls*
4. *Calculate volume and surface areas of three-dimensional objects*

Unit assessment requirements/evidence requirements

1. Direct Observation (DO)
2. Question and answers (QA)
3. Witness Testimony (WT)
4. Work Product (WP)
5. Personal statement (Reflective account) (PS)

Unit: 4 Mathematics Skills in Tiling/decorative stonework

LO (Learning Outcome)	Performance Criteria		Evidence Type				Evidence Page No.			
LO 1 *Analyze drawings with mathematical methods.*	1.1	Carry out basic mathematical operations such as addition, multiplication etc								
	1.2	Use fractional methods to solve practical problems								
	1.3	Add, subtract, multiply and divide with fractions and decimal fractions								
LO 2 *Determine angles when cutting tiles according to the size of the angle*	2.1	Measure angle on tiles/stone required for cutting.								
	2.2	Measure and cut as many different angles as possible.								
	2.3	Use large wooden or plastic protractor to measure angles.								
LO 3 *Calculate surface area of floors and walls*	3.1	Determine area of wall surface in square meter (m2)								
	3.2	Assess area of floor surface in square meter (m2)								
	3.3	Measure perimeter of given rectangle in meter as 2(L+B)								
	3.4	Compare different shapes using relevant formulas								
LO 4 *Calculate volume and surface areas of three-dimensional objects.*	4.1	Measure volume of various shapes								
	4.2	Describe volume of a bedroom, sitting room, convenience e.t.c								
	4.3	Calculate areas of floors, walls in a room								

Learner's Signature:	Date:
Assessor's Signature:	Date:
IQAM Signature (if sampled)	Date:
EQAM Signature (if sampled)	**Date:**

Unit 5: Estimating

Unit reference number: CON/TL/005/L3

NSQ level:	3
Credit value:	4
Guided learning hours:	40

Unit Purpose: The purpose of this unit is to impact the learner with knowledge and skills, required by an individual to be proficient in estimating works, relevant to tiling/decorative stonework in the construction industry.

Objectives

By completing this mandatory unit, Tilers and Stone decorators should show competence in:

1 Estimating quantity of tiles/stone from working drawings
2 Allowing for waste when estimating
3 Evaluating the cost of projects from working drawings

Unit assessment requirements/evidence requirements

1. Direct Observation (DO)
2. Question and answers (QA)
3. Witness Testimony (WT)
4. Work Product (WP)
5. Personal statement (Reflective account) (PS)

Unit: 5 Estimating

LO (Learning Outcome)	Performance Criteria		Evidence Type				Evidence Page No.			
LO 1 *Estimate quantity of tiles/stone from the working drawing*	1.1	Use ~~any~~ working drawing of building, i.e. residential or educational.								
	1.2	Interpret the drawing for ~~to locate~~ the area to be tiled or stonework								
	1.3	Calculate the area to be tiled or decorated with stone								
	1.4	Estimate the quantity of sand and cement required.								
	1.5	Estimate the quantity of adhesive/mortar required.								
	1.6	Request for all materials as required.								
LO 2 *Allow for waste when estimating*	2.1	From drawing, evaluate actual quantity required.								
	2.2	Allow at least five percent (5%) for waste from cutting fraction.								
	2.3	List ways of minimizing waste								
LO 3 *Evaluate cost of project from working drawing*	3.1	Calculate the area from drawings								
	3.2	Prepare quotation of materials e.g. Fine aggregate, cement, adhesive, white cement etc.								
	3.3	Order for materials as required.								

Learner's Signature:	Date:
Assessor's Signature:	Date:
IQAM Signature (if sampled)	Date:
EQAM Signature (if sampled)	**Date:**

Unit 6: Lay Wall and Floor Tiles

Unit reference number: CON/TL/006/L3

NSQ level:	3
Credit value:	4
Guided learning hours:	40

Unit Purpose: The purpose of this unit is to impact on the learner, knowledge and skills required to be proficient in the laying of tiles and decorative stones in the construction industry.

Objective: On completion of this mandatory unit, the learner should be able to show level of competence in:

1. Organizing mixing for adhesives for Tile work
2. Supervising the laying of tiles to level and alignment
3. Ensuring tile joints and surfaces are aligned and flat
4. Fixing and laying mosaic tiles
5. Confirming that grouted joints are straight and uniform in width

Unit assessment requirements/evidence requirements

5. Direct Observation (DO)
2. Question and answers (QA)
3. Witness Testimony (WT)
4. Work Product (WP)
5. Personal statement (Reflective account) (PS)

Unit: 6 Lay Wall and Floor Tiles

LO (Learning Outcome)	Performance Criteria		Evidence Type				Evidence Page No.			
LO 1 *Organize mixing for adhesives for Tile work*	1.1	Organize materials for mixing adhesives								
	1.2	Prepare position for mixing adhesives according to mechanical or manual methods								
	1.3	Monitor the measurements of materials to specification								
	1.4	Observe the mixing of adhesive according to requirements								
LO 2 *Supervise the laying of tiles to level and alignment*	2.1	Interpret the working drawing to locate area to lay the tiles/stones								
	2.2	Supervise setting out the area to receive tiles/stones								
	2.3	Supervise the selection of the tiles required according to size and color.								
	2.4	Cut any fraction to size using an appropriate mechanical cutter.								
	2.5	Supervise the soaking of tiles to absorb initial water to prevent tiles from absorbing water from the mortar.								
	2.6	Lay tiles to standard using adhesives.								
	2.7	Ensure tiles are laid, leveled and aligned including all fractions.								
	2.8	Lay the tiles to the final level.								
	2.9	Supervise the grouting of the joints using adhesives.								
	2.10	Supervise the cleaning of tile surface and work area.								
LO 3 *Ensure tile joints and surfaces are aligned and flat*	3.1	Inspect tile joints as work proceed to ensure bond and joint alignment are even								
	3.2	Use line, straight edge and level as work proceed in								

		accordance with instructions.								
	3.3	Evaluate each joint line before proceeding to the next level in accordance with instructions.								
	3.4	Monitor tiling for wall and floor as required to the final point.								
LO 4 *Fix and lay mosaic tiles*	4.1	Measure area to receive mosaic tiles.								
	4.2	Select the color and pattern of mosaic required.								
	4.3	Calculate the surface area to receive mosaic.								
	4.4	Select mosaic tiles and required fixing adhesives								
	4.5	Fix mosaic in position.								
	4.6	Ensure joints are filled.								
	4.7	Ensure the selected pattern is the designed pattern.								
	4.8	Ensure it is set, aligned and truly flat on the wall or floor								
LO 5 *Confirm that grouted joints are straight and uniform in width*	5.1	Confirm joint alignment is straight.								
	5.2	Confirm joint width are uniform								
	5.3	Organize to fill joints width with grout, i.e slurry or thick cement liquid								
	5.4	Organize to clean excess grout on mosaic tiles								

Learner's Signature:	Date:
Assessor's Signature:	Date:
IQAM Signature (if sampled)	Date:
EQAM Signature (if sampled)	**Date:**

Unit 7: Lay and Install Tile to Internal and External Corners

Unit reference number: CON/TL/007/L3

NSQ level:	3
Credit value:	4
Guided learning hours:	40

Unit Purpose: The purpose of this unit is to impact into learner, knowledge and skills required by an individual to be proficient in organizing, supervising and estimating tiling/stone works in the construction industry.

Objective: On completion of this mandatory unit, the learner should have competency to:

1. Supervise the preparation for laying of tiles to internal and external corners
2. Cut tiles into various fractional sizes
3. Supervise the fixing of the corner tiles

Unit assessment requirements/evidence requirements

1. Direct Observation (DO)
2. Question and answers (QA)
3. Witness Testimony (WT)
4. Work Product (WP)
5. Personal statement (Reflective account) (PS)

Unit 7: Lay and Install Tiles/Stonework to Internal and External Corners

LO (Learning Outcome)	Performance Criteria		Evidence Type				Evidence Page No.			
LO 1 *Supervise the preparation for laying of tiles to internal and external corners*	1.1	Monitor the corners to receive the tiles								
	1.2	Organize tools required to cut tiles into fractional sizes for corners								
	1.3	Analyze materials required for tile laying of corners								
LO 2 *Cut tiles into various fractional sizes.*	2.1	Measure the tiles required for the corners.								
	2.2	Carryout cutting of tiles to various fractional sizes.								
	2.3	Monitor the fractional tiles fit into their position								
LO 3 *Supervise the fixing of the corner tiles*	3.1	Observe mix the required mortar in accordance with specifications.								
	3.2	Observe Soaking of tiles in water.								
	3.3	Use mortar ~~to~~ on the tile surface								
	3.4	Monitor that tiles are in accordance specifications.								
	3.5	Carry out the grout of the joints in accordance with specifications.								
	3.6	Guide the cleaning of the working area and tile surface								

Learner's Signature:	Date:
Assessor's Signature:	Date:
IQAM Signature (if sampled)	Date:
EQAM Signature (if sampled)	**Date:**

Unit: 8 Lay Tiles on Curved Surfaces

Unit reference number: CON/TL/008/L3

NSQ level:	3
Credit value:	4
Guided learning hours:	40

Unit Purpose: The purpose of this unit is to impact on the learner, knowledge and skills, required by an individual to be proficient in tile installation to curved surfaces.

Objective: On completion of this mandatory unit, the learner should have competency to:

1. Organize tile work on curved surfaces
2. Set out the tile work as required.
3. Fix tile to curved surfaces

Unit assessment requirements/evidence requirements

1 Direct Observation (DO)
2 Question and answers (QA)
3 Witness Testimony (WT)
4 Work Product (WP
5 Personal statement (Reflective account) (PS)

Unit 8: Lay Tiles on Curved Surfaces

LO (Learning Outcome)	Performance Criteria		Evidence Type				Evidence Page No.			
LO 1 *Organize tile work on curved surfaces*	1.1	Determine the work position from the working drawings								
	1.2	Ensure tiles are prepared for the position.								
	1.4	Estimate quantity of tiles required								
LO 2 *Set out the tile work as required.*	2.1	Set out the curved surfaces by checking the layout of the tiles								
	2.2	Mark the position of tiles on the curve.								
	2.3	Organize materials and tools as required.								
LO3 Fix tile to curved surfaces	3.1	Measure and cut tiles for curved surface.								
	3.2	Erect tiles using approved mortar.								
	3.3	Monitor the curve is uniform in accordance with specifications.								

Learner's Signature: Date:

Assessor's Signature: Date:

IQAM Signature (if sampled) Date:

EQAM Signature (if sampled) Date:

Unit 9: Decorative Stone Works

Unit reference number: CON/TL/009/L3

NSQ level:	3
Credit value:	4
Guided learning hours:	40

Unit Purpose: The purpose of this unit is to impact on the learner, knowledge, attitudes and skills, required by an individual ~~to be proficient~~ in laying decorative stonework finishes in the construction industry

Unit Objectives

On Completion of this mandatory unit, the learner should have competency in:

1. Supervising preparation for laying of decorative stones
2. Organizing work for decorative stone construction
3. Ensuring stone joints and surfaces are aligned and flat

Unit assessment requirements/evidence requirements

1. Direct Observation (DO)
2. Question and answers (QA)
3. Witness Testimony (WT)
4. Work Product (WP)
5. Personal statement (Reflective account) (PS)

Unit 9: Decorative Stone Works

LO (Learning Outcome)	Performance Criteria		Evidence Type				Evidence Page No.			
LO1: *Supervise preparation for laying of decorative stones*	1.1	Identify the positions in stonework decoration.								
	1.2	Justify the decorative stonework to be laid.								
	1.3	Prepare adhesives (mortar) in accordance with specifications.								
LO 2: *Organize work for decorative stone construction*	2.1	Monitor the work position from the working drawings								
	2.2	Calculate the quantity of stones required								
	2.3	Supervise the selection of the required decorative stones.								
	2.4	Monitor the Setting-out of the foundation in accordance with specifications.								
	2.5	~~Cast~~ Monitor the foundation ~~in~~ concrete casting in accordance with specifications.								
	2.6	Use the required tools to dress the stonework								
	2.7	Use mortar the dressed stones in accordance with specifications.								
	2.8	Assess the grout joints and clean work environment in accordance with Instructions.								
LO 3 *Ensure stone joints and surfaces are aligned and flat*	3.1	Monitor stonework for even bond ~~and~~ joint and alignment.								
	3.2	Evaluate joints line before proceeding to the next layer in accordance with instructions.								
	3.3	Compare stonework ~~as required~~ to the ~~final~~ finish point in accordance with specifications.								

Learner's Signature:	Date:
Assessor's Signature:	Date:
IQAM Signature (if sampled)	Date:
EQAM Signature (if sampled)	**Date:**

Unit 10: Repair of Tile/Stone Works

Unit reference number: CON/TL/010/L3

NSQ level:	3
Credit value:	4
Guided learning hours:	40

Unit Purpose: The purpose of this unit is to impact the learner knowledge and skills, required by an individual to be proficient in the maintenance and repairs to the tile/stonework in the construction industry.

Unit Objectives

On Completion of this mandatory unit, the learner is expected to have competency in:

2. Supervising the repair and maintenance of tile/stone laid surfaces
3. Supervising the selection of tiles/stones for replacement
4. Fixing tiles/stones to damaged area.

Unit assessment requirements/evidence requirements

1. Direct Observation (DO)
2. Question and answers (QA)
3. Witness Testimony (WT)
4. Work Product (WP)
5. Personal statement (PS)
6. Professional discussion (PD)

Unit: 10 Repairs of Tile/Stone Works

LO (Learning Outcome)	Performance Criteria		Evidence Type				Evidence Page No.			
LO1: *Supervise the repair and maintenance of tile/stone laid surfaces*	1.1	Rectify damaged tiles or stonework area by chiseling.								
	1.2	Calculate the total area of tiles or decorative stonework to be replaced.								
	1.3	Carry out cleaning of the area for tiles/decorative stonework removed								
LO 2: *Supervise the selection of tiles/stones for replacement.*	2.1	Determine the quantity of tiles/stonework and adhesives required for ~~the~~ replacement								
	2.2	Selection of tiles/stonework to be replaced according to color.								
	2.3	Organize to Monitor mixing of adhesive/cement grout to be used for re-fixing the tiles.								
LO 3: Fix tiles/stones to damaged area.	3.1	Erect the tiles/stonework in accordance with specifications.								
	3.2	Observe cleaning of the work area								
	3.3	Use tools and equipment are washed and stored properly at the end of each workday								

Learner's Signature:	Date:
Assessor's Signature:	Date:
IQAM Signature (if sampled)	Date:
EQAM Signature (if sampled)	**Date:**

Unit 11: Project Planning

Unit reference number: CON/TL/011/L3

NSQ level:	3
Credit value:	4
Guided learning hours:	40

Unit Purpose: The purpose of this unit is to impact on the learner, knowledge, attitudes and skills, required by an individual, to be proficient in understanding project planning and implementation of construction works.

Unit Objectives:
On completion of this mandatory unit, the learner should be able to show competency to:

1. Explain project planning and coordination
2. Plan basic activities required for tiling/decorative stonework
3. Apply inspection procedures for tiling/stonework

Unit assessment requirements/evidence requirements

1. Direct Observation (DO)
2. Question and answers (QA)
3. Witness Testimony (WT)
4. Personal statement (Reflective account) (PS)

Unit 11: Project Planning

LO (Learning Outcome)	Performance Criteria		Evidence Type				Evidence Page No.			
LO1: *Explain project planning and coordination*	1.1	Explain the basics of project planning processes and procedures.								
	1.2	Evaluate the factors that affect projects from start to finish								
	1.3	Analyze on type, cost, texture etc implication on tile/stonework								
LO 2: *Plan basic activities required for tiling/decorative stonework*	2.1	Identify the project drawings.								
	2.2	Determine the area to be tiled/laid with stonework								
	2.3	Estimate and prepare quotation to include prices of material and labor								
	2.4	Organize and arrange tools/equipment and materials								
	2.5	Monitor the tiling/decorative stonework.								
LO 3: *Apply inspection procedures for tiling/stonework*	3.1	Monitor the job site, check alignment and cleanliness in accordance with specifications.								
	3.2	Observe cracks or lifting of tiles/stonework from surfaces								
	3.3	Evaluate the quality of materials.								
	3.6	Assess compliance with standard operating procedures								

Learner's Signature:	Date:
Assessor's Signature:	Date:
IQAM Signature (if sampled)	Date:
EQAM Signature (if sampled)	**Date:**

National Skills Qualifications

FOR

TILING AND DECORATIVE STONEWORK

LEVEL 1, 2 & 3

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