

REGISTERED NATIONAL STANDARD



UNIT OF COMPETENCY

Title:	Use tiling tools and equipment ¹				
TQF Level:	3	Credits:	4	Version:	1
National standard code:	NS170-03				
Associated qualification (and code):	National Certificate in Wall and Floor Tiling Level 3 QR-03-NQ-028-03-1005-26-01				
Approval date:	10 September 2026		Review date:	10 September 2031	
Purpose:	This unit describes the skills and knowledge required to safely and effectively select, use, maintain and store hand tools, power tools and equipment used in wall and floor tiling work. It includes planning and preparation, selecting appropriate tools and equipment for specific applications, using tools safely in accordance with manufacturers’ recommendations, and completing clean-up activities. This unit ensures that learners can safely and competently operate wall and floor tiling tools and equipment to support efficient, accurate and high-quality tiling work. The unit applies to individuals with basic skills and knowledge who undertake routine tiling tasks under the direction of more experienced workers. All work must be carried out in accordance with work health and safety legislation, environmental requirements, manufacturers’ specifications and workplace procedures. This unit underpins safe working practices and productivity in wall and floor tiling operations. In successfully completing this unit standard, learners are able to: • Apply workplace safety, environmental, and quality requirements • Interpret work instructions, drawings, and specifications for the use of tiling tools and equipment • Plan and organise work activities to ensure efficient and safe tool use • Identify and control hazards associated with using tools and equipment • Select appropriate hand and power tools based on task requirements and safety considerations • Review manufacturers’ recommendations for correct operation of tools and equipment				

¹ Due to safety issues inherent in working with electricity and combustible substances, all training and assessment activities must be in accordance with Tonga National Building Code.

	• Inspect and check tools and equipment for serviceability, safety, and faults • Perform pre-operational checks including power leads, guards, and lubrication • Set up safe power supply and working conditions for tool operation • Operate tiling tools and equipment safely and effectively for required tasks • Use supporting devices to secure and stabilise materials during cutting or shaping • Follow correct start-up and shutdown procedures for tools and equipment • Maintain tools and equipment through regular cleaning and servicing • Store tools and equipment safely when not in use • Comply with workplace quality standards and manufacturer guidelines • Clean up work areas after completion of tasks
Learning Outcome 1 (LO1)	Prepare to use tiling tools and equipment
Performance standards	1.1 Read and interpret task instructions to use tools and equipment; 1.2 Plan all work to comply with laws and regulations, work health and safety and environmental requirements, manufacturers' recommendations, workplace requirements, drawings and specifications; 1.3 Select and use personal protective equipment (PPE) as required for each stage of the task; 1.4 Inspect work site, assess hazards and apply risk controls, including required signage and barricades.
Learning Outcome 2 (LO2)	Select hand tools, power tools and equipment
Performance Standards	2.1 Select tools and equipment consistent with hazard minimisation and requirements of the task.; 2.2 Review manufacturers' recommendations for operating and using tools and equipment; 2.3 Check tools and equipment for correct function and report any faults; 2.4 Check power leads for current tags, safety and serviceability and report any faults; 2.5 Check and maintain power tool guards following manufacturers' recommendations; 2.6 Follow OHS requirements for using tools and equipment; 2.7 Select devices to safely hold or support material during operation;

	2.8 Complete pre-operational checks, including checking lubricants and water.
Learning Outcome 3 (LO3)	Use tools and equipment and clean up
Performance standards	3.1 Connect safe power supply to work area; 3.2 Undertake start-up and shut-down processes following manufacturers' recommendations; 3.3 Use tools and equipment safely and effectively in accordance with manufacturers' recommendations and workplace requirements; 3.4 Switch off tools and equipment and locate safely when not in immediate use; 3.5 Clean and check tools and equipment and report any fault or damage to relevant personnel; 3.6 Store tools and equipment in accordance with manufacturers' recommendations.
Pre-requisites	NS133-03 Apply <i>Occupational Health and Safety</i> (OHS) requirements, policies and procedures
Co-requisites	N/A
Underpinning skill and knowledge	The following skills and knowledge underpin this unit standard: <u>Skills:</u> Planning and Preparation • Reading and interpreting task instructions, drawings and specifications • Planning work activities to meet OHS, environmental and workplace requirements • Selecting and using appropriate personal protective equipment • Identifying workplace hazards and implementing risk control measures Tool and Equipment Selection • Selecting hand tools and power tools appropriate to the tiling task • Reviewing and following manufacturers' operating instructions

	• Conducting pre-operational checks on tools and equipment • Checking power leads, guards and safety devices and reporting faults Practical Tool Use • Connecting safe power supplies to the work area • Using a range of wall and floor tiling tools safely and effectively • Operating tools in accordance with manufacturers' recommendations • Applying safe start up and shut down procedures • Safely supporting or securing materials during tool operation Clean up and Maintenance • Switching off tools when not in use and storing safely • Cleaning tools and equipment after use • Conducting routine maintenance checks • Storing tools and equipment in accordance with workplace requirements <u>Knowledge:</u> Regulatory and Workplace • Workplace quality policies and standards for using wall and floor tiling tools and equipment • OHS requirements relevant to tool and equipment use, including: ○ Job safety analyses (JSA) and/or safe work method statements ○ Personal protective equipment (PPE) • Environmental requirements for operating and maintaining tiling equipment Tools and Equipment • Characteristics, applications and safe use of wall and floor tiling tools and equipment, including: ○ Buckets and mixing equipment ○ Measuring and levelling tools (string lines, spirit levels, laser levels, straight edges) ○ Cutting tools (tile cutters, scribes, nippers, wet and dry diamond saws, diamond hole saws) ○ Hand tools (trowels, floats, scrapers, hammers, spacers and wedges)
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	○ Power tools (power drills, angle grinders, adhesive mixers) ○ Power leads and electrical safety devices ○ Lippage reduction systems Operational and Safety • Manufacturers' recommendations for use, maintenance and storage of tools and equipment • Safe operating procedures and basic maintenance requirements • Hazard identification and fault reporting processes
Assessment requirements	<u>Assessment methods</u> may include more than one of the following: Direct Observation Assessment of learners while they are performing tasks in real time in a real simulated environment. • The learner performs practical tasks. • The assessor watches the learner complete these tasks against a checklist or performance standards. Assessor Requirements • Use a structured observation checklist aligned to performance standards • Observe multiple occasions to ensure consistency of competence. • Record evidence of safe work practices, correct use of equipment, etc. • Provide immediate feedback where appropriate. • Ensure conditions reflect real workplace standards. Oral Questioning Verbal questions asked to assess the learner's understanding of knowledge and reasoning. • Conducted during or after practical tasks. • Can be structured (planned questions) or informal (follow-up probing).

Assessor Requirements

- Ask questions that test underpinning knowledge
- Use open-ended questions
- Confirm learner understanding where practical performance is not enough.
- Record responses clearly (notes or checklist).
- Adjust language to suit learner literacy levels.

Written Test

A structured assessment requiring learners to provide written responses.

- Short-answer questions, multiple choice, or case scenarios.
- Typically conducted off-site or in a classroom environment.

Assessor Requirements

- Design questions that assess knowledge.
- Ensure the test is clear, aligned to unit requirements and appropriate for language, literacy, numeracy levels
- Mark responses using a marking guide or model answers.
- Provide feedback and identify gaps in knowledge.
- Ensure results reflect the learner's independent performance.

Work-Based Activity

Assessment conducted in a real workplace while the learner performs actual job tasks.

- Learners complete normal workplace duties.
- Evidence is collected over time.

Assessor Requirements

- Coordinate with workplace supervisors.
- Gather evidence such as - Observation reports, Supervisor feedback, etc.
- Verify that tasks meet unit performance standards.
- Ensure authenticity (learner's own work).
- Confirm competence across different situations and timeframes.

Assessment should use a combination of the above methods to ensure sufficient, valid, authentic, and current evidence of competence in both skills and knowledge, in line with unit requirements.

	<u>Context of Assessment:</u> Competency is to be assessed in the workplace or a simulated workplace environment that accurately reflects a real workplace setting. Assessment is to comply with relevant regulatory or relevant standards' requirements. Assessment of essential knowledge will usually be conducted in an off-site situation.
Moderation arrangements	1. Training providers must have their own moderation system approved by TNQAB before accreditation is granted: a) Relevant internal moderation processes are documented; b) Assessment is planned for each unit, and moderation processes are integrated into such plan. 2. Unless specified elsewhere, external moderation is conducted by the National Qualifications unit of TNQAB for all unit components of a national qualification: a) Samples of assessed activities are submitted for moderation; b) Moderation (external) forms are available on request.
Resource requirements	1. Power point presentations 2. Trainer's Guide 3. Learner's Guide 4. Videos on using tiling tools and equipment 5. Tape measures 6. Squares 7. Straight edges 8. Spirit levels 9. Laser levels 10. String lines 11. Hammers 12. Nippers 13. Scrapers 14. Shovels 15. Trowels 16. Floats 17. Sponges

	18. Squeegees 19. Tile installation tools: Spacers and wedges 20. Tile cutters and scribes 21. Caulking guns 22. Power tools and equipment: Power drills 23. Angle grinders 24. Wet and dry diamond saws 25. Diamond hole saws 26. Adhesive mixers 27. Power leads 28. Buckets 29. Lippage reduction systems 30. Tiles and tiling materials (for practice tasks) 31. Adhesives and grouts (for tool use practice) 32. Job Safety Environment Analysis (JSEA) 33. Safety Data Sheets (SDS) 34. PPEs 35. Structured assessment and evidence-collection tools 36. Wheelbarrow 37. Grill mixer 38. Chalk line 39. Suction cup lifter with handle 40. Tiling vibrator suction cup 41. Tile self levelling systems
Requirements to complete this unit	There are three (3) Learning outcomes and eighteen (18) Performance standards to measure competence. To demonstrate competence, the person studying this unit is: a. Required to demonstrate all LOs to the expected standards; b. Required to attain an Achieved Grade (Competent) to fulfil the requirements of the Unit Standard; c. Eligible to three (3) attempts to achieve the required competency within 14 days of the first attempt. Failure to achieve the required competency after three (3) attempts on the specific part of the assessment will require the person studying this Unit to re-enrol for the same Unit.

Important notes and definitions

Notes:

1. All training and assessment activities must be in accordance with Tonga National Building Code.
2. Assessors must comply with the Tonga national assessment and moderation requirements.

Definitions:

1. *Angle Grinder* refers to power tool used for cutting, grinding, or smoothing tile edges.
2. *Caulking Gun* is a tool used to apply sealant evenly in joints.
3. *Diamond Saw* is a cutting tool with diamond-tipped blades used for wet or dry cutting of tiles.
4. *Environmental Requirements* refer to regulations and workplace procedures aimed at reducing environmental impact, including waste management and recycling.
5. *Hand Tools* refer to manual tools operated without power, such as trowels, hammers, and scrapers.
6. *Hazard Control* refers to measures implemented to reduce or eliminate risks in the workplace.
7. *JSEA (Job Safety and Environmental Analysis)* refers to process identifying hazards and environmental risks.
8. *Maintenance* refers to the process of cleaning, repairing, and servicing tools to keep them in working condition.
9. *Manufacturer's Recommendations* refer to guidelines provided by tool manufacturers for safe and correct use.
10. *Power Tools* refer to tools powered by electricity or batteries, such as drills, grinders, and tile saws.
11. *PPE (Personal Protective Equipment)* refers to equipment worn to protect workers from hazards (e.g., gloves, boots, goggles).
12. *Pre-Operational Check* refers to inspection and testing of tools before use to ensure safety and functionality.
13. *SDS (Safety Data Sheet)* refers to a document providing safety information about materials and chemicals.
14. *Spacer* is a small device used to maintain consistent gaps between tiles.
15. *Start-Up and Shut-Down Procedures* refer to steps followed to safely begin and end the operation of tools.
16. *Substrate* refers to the surface on which tiles are installed.

	17. <i>Tile Cutter</i> is a tool used to cut tiles to required sizes and shapes. 18. <i>Tiling Tools and Equipment</i> refers to hand tools and power tools used in the installation, cutting, and finishing of wall and floor tiles. 19. <i>Tolerance</i> refers to the allowable variation in construction dimensions or application thickness. 20. <i>Tolerance</i> refers to the allowable variation in measurement or finish quality.
Public comments on unit	Please contact TNQAB National Qualifications Unit (email EnquireNQ@tnqab.to or Telephone 28136) if you like to discuss or suggest changes to the details of this unit.