

REGISTERED NATIONAL STANDARD



UNIT OF COMPETENCY

Title:	Carry out brick veneer construction ¹				
TQF Level:	4	Credits:	5	Version:	1
National standard code:	NS156-04				
Associated qualification (and code):	National Certificate in Bricklaying and Blocklaying Level 4 QR-04-NQ-028-02-1005-26-01				
Approval date:	10 September 2026		Review date:	10 September 2031	
Purpose:	This unit describes the skills and knowledge required to construct brick veneer buildings and structures, including structural and non-structural components and finishing works. The unit covers the full brick veneer process, from preparation and setting out through to wall construction, joint finishing, and site clean-up. It is intended for individuals working on new or existing structures who are able to organise and complete tasks while complying with workplace procedures, safety requirements, and construction standards. This unit supports bricklayers who are expected to take responsibility for assigned brick veneer tasks and complete work without close supervision while meeting Tonga National Building Code requirements In successfully completing this unit standard, learners are able to: • Prepare for brick veneer construction work • Interpret plans, specifications, standards, and building codes • Set out veneer brickwork accurately • Construct base brickwork and full brick veneer walls • Install critical structural and moisture-control components • Finish brick veneer walls to required quality and tolerances • Apply workplace health, safety, environmental, and quality requirements • Clean and secure tools, equipment, and worksites				

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.

Learning Outcome 1 (LO1)	Prepare and organise brick veneer construction work
Performance standards	1.1 Read and interpret brick veneer construction requirements from current plans, specifications, standards and codes; 1.2 Follow requirements for safe work practices; 1.3 Calculate material quantities for the task; 1.4 Determine job priorities and sequence job tasks in consultation with others on site; 1.5 Select and use personal protective equipment (PPE) appropriate for job; 1.6 Identify potential hazards and determine and implement control measures; 1.7 Select and check condition of equipment and tools and report any damage to relevant person; 1.8 Check materials against the specifications and report any issue to relevant person.
Learning Outcome 2 (LO2)	Set out brick veneer work
Performance Standards	2.1 Mark base brick work; 2.2 Set out brick gauge and bond; 2.3 Mark brick veneer walls; 2.4 Mark load bearing brick work.
Learning Outcome 3 (LO3)	Construct base brick work
Performance standards	3.1 Place materials ready for the work; 3.2 Mix mortar to specified consistency; 3.3 Locate and prepare damp proof course and weepholes; 3.4 Install damp proof course and weepholes.
Learning Outcome 4 (LO4)	Construct brick veneer walls
Performance standards	4.1 Check and ensure that structural frame is plumb and straight; 4.2 Install specified lintels to openings; 4.3 Install flashings to window and door openings; 4.4 Fix wall tie to specify position; 4.5 Construct brick walls to eaves height; 4.6 Construct veneer gable to gauge, level, plumb and straightness; 4.7 Locate and form control joints as specified;

	4.8 Cut and lay sill bricks to a line.
Learning Outcome 5 (LO5)	Rake or rule joints and clean brick face
Performance standards	5.1 Clean cavities of mortar droppings and bridging; 5.2 Rake joints to specified profile; 5.3 Rule joints to specified depth; 5.4 Clean face of brick work to remove unwanted/residue mortar.
Learning Outcome 6 (LO6)	Clean up brick veneer work area.
Performance standards	6.1 Clear the work area and dispose of materials following workplace and environmental requirements; 6.2 Clean tools and equipment, check for serviceability and report damage or faults; 6.3 Store and secure tools and equipment following workplace procedures; 6.4 Store materials for reuse or recycle following workplace requirements.
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 brick veneer drawings, specifications, standards, and codes • Calculating material quantities using measurements and formulas • Sequencing job tasks and coordinating with others on site • Selecting, fitting, and using appropriate personal protective equipment (PPE)

	• Identifying hazards and implementing appropriate risk controls • Selecting and checking tools, plant, and equipment for serviceability Techniques for Brick Veneer Construction • Setting out base brickwork • Establishing brick gauge, bond, wall lines, and profiles • Mixing mortar to specified consistency • Installing damp proof courses (DPC) and weepholes • Checking and aligning structural frames to ensure plumb and straightness • Installing wall ties, lintels, flashings, and control joints • Constructing brick veneer walls to specified heights and tolerances • Building gables and eaves while maintaining gauge, level, and alignment • Cutting and laying sill bricks accurately • Raking or ruling joints to the specified profile and depth • Cleaning brick faces and wall cavities to remove mortar residue Using Tools, Equipment, and Technology • Using hand tools, battery-operated tools, and relevant masonry equipment safely • Using digital tools to source job information and communicate effectively on site Housekeeping and Workplace Practices • Clearing work areas and managing waste through disposal, reuse, or recycling • Cleaning, inspecting, and storing tools and equipment • Reporting faulty or damaged equipment according to workplace procedures <u>Knowledge:</u> Materials Selection and Components • Characteristics, applications, and limitations of materials used in brick veneer construction, including:
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	• Aggregates, cement, lime, and mortar ingredients • Mortar consistency requirements • Clay bricks and brick bricks • Damp-proofing, flashing, and ventilation materials • Brick Veneer Construction Principles • Construction terminology related to brick veneer work • Brick veneer systems on: • Concrete slabs on ground • Suspended floor construction • Installation of: • Frame ties and load-bearing components • Lintels over openings • Window and door frames • Roof tie-downs • Control and articulation joints • Brick expansion, movement, and growth • Brick bond patterns • Gable and eaves construction techniques • Fire separation, fire resistance, and stability requirements • Vermin control and anti-termite measures Tools and Equipment • Functional and operational features of tools and equipment, including battery-operated tools Safety, Standards, and Compliance • Workplace safety requirements, including: • Job Safety and Environmental Analysis (JSEA) • Working at heights • Exposure to silica dust • Exposure to loud noise • Requirements for erecting and dismantling restricted-height scaffolds • Acceptable brickwork tolerances specified in Tonga National Building Code requirements. • Features and interpretation of working drawings and specifications • Environmental requirements for workplace processes and waste management
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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 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
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	• 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. Tonga National Building Code 5. Videos on brick veneer construction 6. Plans and Specifications 7. Brick laying tools and equipment 8. Bricks or blocks suitable for arch construction 9. Cement 10. Sand 11. Lime 12. Water 13. Template materials (timber or metal for arch centres) 14. Support materials (props, wedges, toms) 15. Trowels 16. Brick hammer 17. Bolster chisel 18. Jointing tools 19. Tape measures 20. Spirit levels 21. Squares 22. String lines 23. PPE's 24. Structured assessment and evidence-collection tools 25. Heavy duty grinder 26. Brick cutting saw
Requirements to complete this unit	There are six (6) Learning outcomes and thirty-two (32) 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	<u>Notes:</u> 1. All training and assessment activities must be in accordance with Tonga Building National Code . 2. Assessors must comply with the Tonga national assessment and moderation requirements. <u>Definitions:</u> 1. <i>Aggregate</i> refers to sand or crushed stone used in mortar. 2. <i>Bond pattern</i> refers to arrangement of bricks to provide strength and appearance. 3. <i>Brick veneer</i> refers to non-structural outer brick layer attached to a structural frame. 4. <i>Brickwork</i> refers to construction using bricks or blocks bonded together. 5. <i>Clean up</i> refers to dispose of waste and maintain tools and site. 6. <i>Construct veneer walls</i> refers to build external masonry layer. 7. <i>Control joint</i> refers to joint allowing movement to prevent cracking. 8. <i>Corbelling</i> refers to projection of bricks beyond the face of a wall. 9. <i>Damp-proof course (DPC)</i> refers to barrier preventing moisture from rising. 10. <i>Finish work</i> refers to clean joints and brick surfaces. 11. <i>Flashing</i> refers to material used to prevent water penetration in joints. 12. <i>Gauge</i> refers to consistent height measurement of brick courses

13. *Install components* refers to fix ties, lintels, and structural elements.
14. *JSEA (Job Safety and Environmental Analysis)* refers to risk assessment process.
15. *Level* refers to horizontal alignment.
16. *Lintel* refers to beam supporting load above openings (doors/windows).
17. *Mortar* is a mixture of cement, sand, lime, and water used to bond bricks.
18. *OHS (Occupational Health and Safety)* refers to workplace safety regulations and practices.
19. *Plumb* refers to vertical alignment of a wall.
20. *PPE (Personal Protective Equipment)* refers to safety equipment such as helmets, boots, gloves, and high-visibility clothing.
21. *Prepare for work* refers to organise materials, plans, and safety requirements.
22. *Raking joints* refer to removing mortar to create joint profile.
23. *Residue* refers to unwanted mortar.
24. *Set out* refers to marking positions for construction work.
25. *Setting-Out Instruments* refer to tools used to measure and align structures (e.g., tape measures, spirit levels, automatic and laser levels)
26. *Silica dust* refers to hazardous dust produced during cutting masonry materials.
27. *Tonga National Building Code* is a set of technical provisions for the design and construction of buildings and structures in Tonga.
28. *Wall tie* refers to connector fixing masonry veneer to structural frame.
29. *Weepholes* refer to openings allowing moisture drainage from cavities
30. *Work area* refers to the particular section where tasks are performed at the work site.

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.