

	Unit ID: 22
Domain	BRICKLAYING
Title:	Construct masonry curved walls
Level: 3	Credits: 4

Purpose

This unit standard specifies the competencies required to construct masonry curved walls. It includes the preparation, set out and construction of curved walls. This unit standard is intended for those who as bricklayers and plasterers.

Special Notes

1. Entry information
 - Prerequisite:
 - Unit 3 – *Apply safety rules and regulations in bricklaying operations* or demonstrated equivalent knowledge and skills.
2. The unit standard requires the laying of bricks/blocks to construct curved walls.
3. To demonstrate competence, at a minimum, requires evidence of constructing two curved walls using the template method and trammel method. Perform these tasks ensuring correct identification of requirement and finishing of the tasks, correct selection and use of appropriate processes, tools and equipment and completing all work to specification.
4. Assessment evidence may be collected from a real workplace or a simulated real workplace or an appropriate simulated realistic environment in which bricklaying operations are carried out.
5. All inspection, operation and maintenance procedures associated with the use of tools and equipment shall comply with manufacturers' guidelines and instructions.
6. '*Specifications*' refers to any, or all of the following: manufacturers' specifications and recommendations, site and workplace specific requirements.
7. Regulations and legislation relevant to this unit standard include the following:
 - Labour Act No 6, 1992
 - Occupational Health and Safety Regulations No.18, 1997
 and all subsequent amendments.

Quality assurance requirements

This unit standard and others within this subfield may be awarded by institutions which meet the accreditation requirements set by the Namibia Qualifications Authority and the Namibia Training Authority and which comply with the national assessment and moderation requirements. Details of specific accreditation requirements and the

national assessment arrangements are available from the Namibia Qualifications Authority and the Namibia Training Authority on www.nta.com.na

Elements and Performance Criteria

Element 1: Plan and prepare for work

Range

Planning and preparation is to include but is not limited to worksite inspection, equipment defect identification, assessment of conditions and hazards and determination of work requirements.

Tools and equipment are to include but are not limited to wheelbarrows, concrete mixers, buckets, hoses, shovels, measuring tapes/rules, plumb rules, jointing tools, hammers, bolsters, spirit levels, dumpy levels, trowels, mortar boards, straight edges, profiles, string lines, line blocks, line pins, builders lines, masonry saws, mason's squares, builder's squares, pointing or raking tools, curve templates and trammel heads. Tools and equipment may include brick barrows and small petrol/diesel mixers.

Materials are to include but are not limited to clay bricks, masonry blocks, reinforcing materials, aggregates, cement and lime. Materials may include waterproofing materials.

Performance Criteria

- 1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied.
- 1.2 Safety requirements are followed in accordance with safety plans and policies.
- 1.3 Sign and barricade requirements are identified and implemented.
- 1.4 Plant, tools and equipment selected to carry out tasks are consistent with the requirements of the job, checked for serviceability and any faults are rectified or reported prior to commencement.
- 1.5 Material quantity requirements are calculated in accordance with plans and/or specifications.
- 1.6 Materials appropriate to the work application are identified, obtained, prepared, safely handled and located ready for use.
- 1.7 Environmental protection requirements for the project are identified and applied in line with environmental plans and regulatory obligations.

Element 2: Set out curve

Range

Methods of constructing masonry curved walls are to include trammel and templates.

Performance Criteria

- 2.1 Key plan curve points are plotted from job drawings and all trammel centres established on footing slab.
- 2.2 Curve of wall is planned to specified location from trammel or plotted points and marked on footing slab.

Element 3: Lay first course

Performance Criteria

- 3.1 Mortar is mixed to specifications and spread evenly to the established wall location.
- 3.2 Bricks/blocks are laid to planned set out for line and specified bond according to job specifications.
- 3.3 Work is carried out to job specifications and standards.

Element 4: Lay wall

Performance Criteria

- 4.1 Gauge is maintained within standard tolerance at every course level.
- 4.2 Vertical face alignment is maintained.
- 4.3 Bricks are cut to requirements.
- 4.4 Bricks/blocks are laid level over the length of the wall to the established plan profile.
- 4.5 Bricks/blocks are laid to specified bond with perpendicular joints (perpend) maintained in vertical line.
- 4.6 Construction is completed to requirements of job drawings and specifications.

Element 5: Finish joints

Performance Criteria

- 5.1 Excess mortar is removed from brick/block work surfaces in accordance with manufacturers' recommendations, job specifications, standards and codes.
- 5.2 Joints of laid brickwork/block work are raked or ruled to correct profile and depth to job specifications.
- 5.3 Brickwork/block work is brushed down prior to drying.

Element 6: Clean up

Performance Criteria

- 6.1 Work area is cleared and materials disposed of, reused or recycled in accordance with legislation/regulations and job specification.
- 6.2 Plant, tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturers' recommendations and standard work practices.

Registration Data

Subfield:	General Construction
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