

Domain	BRICKLAYING	Unit ID: 41
Title:	Restore or renovate concrete, brick and block structure	
Level: 4		Credits: 8

Purpose

This unit standard specifies the competencies required to undertake the restoration or renovation of a concrete, brick or block structure. It includes the planning and preparation for the work, the selection of the renovation or restoration method, the demolition of the structure and the renovation/restoration of the structure. This unit standard is intended for those who work 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. To demonstrate competence, at a minimum, requires evidence of restoring or renovating a small scale concrete, brick or block structure. Perform these tasks ensuring correct identification of requirements and finishing of the tasks, correct selection and use of appropriate processes, tools and equipment and completing all work to specification.
3. 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.
4. Glossary of terms
 - *'restoration'* means to return a structure to an earlier good condition
 - *'renovation'* means to repair and improve a structure.
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 measuring tapes/rules, spirit levels, squares, trowels, floats, brushes, screed boards, straight edges, grinders, mortar boards and stands, shovels, wheelbarrows, hawks, joint rules, small tools, plumb bobs and mason's squares, buckets, sieves, power leads, hammers, tin snips, and may include metal files, concrete mixers, scaffolding, hammers, pinch bars, crow bars, picks, sledge hammers, brooms, water hoses and spray attachments, pneumatic and electric tools, air compressors, power leads, props, saw stools and planks, ladders, power saws, hand saws, angle grinders, chisels, spanners, allen keys, pliers, pincers and hack saws.

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: Inspect structure and select renovation/restoration method

Range

Structures include concrete, brick and block structures and may include, but are not limited to, straight or curved walls, straight or curved ceilings, chimneys and archways.

Performance Criteria

- 2.1 Inspect structure to establish extent and cost benefit of proposed renovation/restoration.
- 2.2 Inspection method and criteria are consistent with the purpose of the inspection, client requirements and type of structure.
- 2.3 Relevant documentation is obtained to clarify inspection requirements.
- 2.4 Extent and type of restoration or renovation required are identified by site examination and from plans and specifications.

Element 3: Carry out demolition

Performance Criteria

- 3.1 Designated demolition area is assessed to determine scope of work.
- 3.2 Risks are identified and managed.
- 3.3 Preparatory work is completed.
- 3.4 Demolition procedures are carried out consistent with safe and effective processes of dismantling/demolishing and removing materials from location to designated storage area.
- 3.5 Materials and building component parts are safely and effectively handled using appropriate material handling techniques consistent with the type of building materials and components.
- 3.6 Materials and components identified for salvage are safely and effectively handled, stored and stacked ready for transport in accordance with safe material handling practices and techniques.

Element 4: Reconstruct structure

Performance Criteria

- 4.1 Work area requirements are prepared in accordance with working drawings, specifications and established work procedures.
- 4.2 Set out, levelling, construction and erection/installation of project is implemented in accordance with line, level and plumb.
- 4.3 Construction project is completed to specification and checked for conformity to plans and design specifications.

Element 5: Restore surfaces

Performance Criteria

- 5.1 Materials are selected, mixed and prepared for use.

- 5.2 Damaged surface is restored to original condition or specifications in accordance with plans and specifications.
- 5.3 Finishes are applied to match original surfaces, details and alignment.

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 specifications.
- 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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