

Unit ID: 31

Domain

BRICKLAYING

Title:

**Use concreting machine tools and small
plant and equipment**

Level: 3

Credits: 2

Purpose

This unit standard specifies the competencies required to safely and effectively use concreting machine tools and plant and equipment in bricklaying tasks. It includes the identification, selection, use, routine maintenance and storage of machine tools, small plant and equipment. 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 using three different tools in undertaking a general concreting task. Also demonstrate use of two different items of small plant and equipment in undertaking a general concreting task. 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. Machine tools (portable and static) are to include but are not limited to saws, compactor, jackhammer, power drill, vibrator, grinders, mixers, concrete cutter and leads.
5. Plant and equipment are to include but are not limited to small petrol/diesel driven generator and mixers, earth linkage equipment and lightning sets.
6. All inspection, operation and maintenance procedures associated with the use of tools and equipment shall comply with manufacturers' guidelines and instructions.
7. '*Specifications*' refers to any, or all of the following: manufacturers' specifications and/or recommendations, site and/or workplace specific requirements.
8. Regulations and legislation relevant to this unit standard include the following:
 - Labour Act No.6, 1992
 - Occupational Health and Safety Regulations No.18, 1997and 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.

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: Identify, select and use concreting machine tools

Performance Criteria

- 2.1 Machine tools, their functions, operations and limitations are identified and selected.
- 2.2 Safety requirements for using power tools are recognised and adhered to.
- 2.3 Lubricants, hydraulic fluid and water are checked according to manufacturers' recommendations.

- 2.4 Machine tools are selected consistent with job requirements.
- 2.5 Machine tools, including leads and hoses, are checked for tags, serviceability and safety and any faults reported.
- 2.6 Machine tool guards, retaining bolts, couplings, gauges and controls are checked and maintained in accordance with manufacturers' recommendations.
- 2.7 Equipment to hold or support material during operation is selected.
- 2.8 Machine tools are safely and effectively used in accordance with manufacturers' recommendations and safety requirements.
- 2.9 Machine tools are sharpened and maintained.

Element 3: Identify, select and use plant and equipment

Performance Criteria

- 3.1 Plant and equipment are selected.
- 3.2 Plant and equipment are checked for safety and faults are reported.
- 3.3 Lubricants, hydraulic fluid and water are checked according to manufacturers' recommendations.
- 3.4 Start up and shut down procedures are observed.
- 3.5 Plant and equipment are used consistently with safety requirements, manufacturers' specifications and the needs of the job.
- 3.6 Plant and equipment are safely switched off and stored when not in use.
- 3.7 Plant and equipment are maintained in accordance with manufacturers' recommendations and standard work practices.

Element 4: Clean up

Performance Criteria

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

Registration Data

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| Body responsible for review: | Namibia Training Authority |