

Domain	PLUMBING	Unit ID: 437
Title:	Read and produce basic sketches and drawings used in plumbing operations	
Level: 1		Credits: 2

Purpose

This unit standard specifies the competencies required to read and produce basic sketches and drawings as part of plumbing operations. It includes producing freehand sketches of letters and numbers, producing freehand sketches of geometric forms, producing isometric drawings, producing orthographic drawings and producing different patterns.

This unit standard is intended for those who work as plumbers.

Special Notes

1. This unit standard should be assessed in the context of plumbing operations and should be assessed in conjunction with other relevant technical unit standards selected from this domain.
2. Assessment evidence may be collected from a real workplace or simulated real workplace or an appropriate simulated realistic environment in which plumbing operations are carried out.
3. Performance of all elements in this unit standard must comply with workplace requirements and/or manufacturers' specifications.
4. 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: Produce freehand sketches of letters and numbers

Performance Criteria

- 1.1 Letters are sketched in line with specifications and standard drawing conventions.
- 1.2 Numbers are sketched in line with specifications and standard drawing conventions.

Element 2: Read and produce freehand sketches of geometric forms

Performance Criteria

- 2.1 Geometric forms are identified.
- 2.2 Geometric forms are drawn in line with specifications and standard drawing conventions.

Element 3: Read and produce basic isometric drawings

Performance Criteria

- 3.1 Isometric drawings are identified.
- 3.2 Symbols and abbreviations are used in line with standard drawing conventions.
- 3.3 Legend is constructed in line with standard drawing conventions.
- 3.4 Plumbing work pieces are drawn in isometric projection in line with standard drawing conventions.

Element 4: Read and produce basic orthographic drawings in first angle and third angle projection

Performance Criteria

- 4.1 Basic orthographic drawings in first angle and third angle projection are identified.
- 4.2 Symbols and abbreviations are used in line with standard drawing conventions.
- 4.3 Legend is constructed in line with standard drawing conventions.
- 4.4 Plumbing work pieces are drawn in orthographic projection in line with the conventions of first angle and third angle projection.

Element 5: Read and produce different patterns

Range

Patterns include but are not limited to rectangular box, square pyramid, square to round pieces and cone.

Performance Criteria

- 5.1 Different patterns for different applications are identified.
- 5.2 Different patterns are developed in line with specifications and workplace requirements.

Registration Data

Subfield:	General Construction
Date first registered:	15 November 2007
Date this version registered:	15 November 2007
Anticipated review:	2010
Body responsible for review:	Namibia Training Authority