

Unit ID: 444

Domain

PLUMBING

Title:

**Perform basic pipe-work as part of
plumbing operations**

Level: 1

Credits: 4

Purpose

This unit standard specifies the competencies required to perform pipe-work. It includes the planning and preparing for work, identifying and selecting different piping materials and fittings, assembling pipes and cleaning up the work area.

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

Special Notes

1. Entry information:

Prerequisite

- 434 - *Apply safety rules and regulations in plumbing operations or demonstrated equivalent knowledge and skills.*

2. To demonstrate competence, at a minimum, evidence is required of completing three separate pipe-work tasks, involving the measuring, cutting and assembling of pipe-work to specifications.

3. Tools and equipment include but are not limited to hacksaws, pipe benders, pipe vices, pipe wrenches, measuring tape, pipe reamers, files, stocks and dies, shifting spanners and blue lamps.

4. Materials may include but are not limited to galvanised mild steel pipes, copper pipes, pvc (poly vinyl chloride) pipes, planons and fittings.

5. Assessment evidence may be collected from a real workplace or a simulated real workplace or an appropriate simulated realistic environment in which plumbing operations are carried out.

6. Safe working practices are to include day to day observation of safety policies and procedures and compliance with emergency procedures.

7. Performance of all elements in this unit standard must comply with all relevant workplace requirements and/or manufacturers' specifications.

8. 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 includes 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 in line with workplace procedures.
- 1.2 Safety requirements are followed in line with workplace procedures.
- 1.3 Sign and barricade requirements are identified and implemented in line with workplace procedures.
- 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 line with plans and specifications.
- 1.6 Materials appropriate to the work application are identified, obtained, prepared, safely handled and located ready for use in line with workplace procedure.
- 1.7 Environmental protection requirements are identified and applied in line with environmental plans and regulatory obligations.

Element 2: Assemble pipes

Range

The different jointing methods include but are not limited galvanised mild steel pipe jointing (soldering), copper pipe jointing (soldering), PVC pipe jointing (glazing), clay/concrete pipe jointing (concreting).

Performance Criteria

- 2.1 Measurements are taken and marked as indicated on drawings and sketches.
- 2.2 Pipes are cut to length in line with specifications and/or dimensions taken on site.
- 2.3 Pipe ends are prepared for mechanical, solvent or cement type joints in line with workplace procedures.
- 2.4 Pipe joints techniques are applied in line with job requirements.

Element 3: Clean up work area

Performance Criteria

- 3.1 Work is completed and appropriate personnel notified in line with workplace procedures.
- 3.2 Work area is cleared of waste, cleaned, restored and secured in line with workplace procedures.
- 3.3 Plant, tools and equipment are cleaned, checked and maintained in line with workplace procedures.
- 3.4 Work completion details are finalised in line with workplace procedures.

Registration Data

Subfield:	General Construction
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