

<b>Domain</b>	<b>PLUMBING</b>	<b>Unit ID: 435</b>
<b>Title:</b>	<b>Use and maintain hand tools used in plumbing operations</b>	
<b>Level: 1</b>		<b>Credits: 2</b>

### Purpose

This unit standard specifies the competencies required to safely and effectively use hand tools used in plumbing tasks. It includes the identification, selection, use and maintenance of hand tools used in plumbing work.

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. 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. Hand tools include but are not limited to hack saw, tube cutters, cutting snips, wood saw, screw drivers, pipe wench, tube flaring tools, copper tube expanders, drill, tube benders, pipe benders, rasps, spirit level, square, pop riveter, silicon guns, pipe dies.
4. Performance of all elements in this unit standard must comply with all relevant workplace requirements and/or manufacturers' specifications.
5. 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](http://www.nta.com.na).

## **Elements and Performance Criteria**

### **Element 1: Plan and prepare for work**

#### **Range**

Materials for plumbing may include but are not limited to pipes and fittings, taps, mixers, valves, washers, sheet metal.

#### **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 Material quantity requirements are calculated in accordance with plans and/or specifications.
- 1.5 Materials appropriate to the work application are identified, obtained, prepared, safely handled and located ready for use in line with workplace procedures.
- 1.6 Environmental protection requirements are identified and applied in line with environmental plans and regulatory obligations.

### **Element 2: Identify select and use plumbing hand tools**

#### **Performance Criteria**

- 2.1 Hand tools are identified and selected in line with job requirements
- 2.2 The methods of operation of hand tools are identified from specifications, standards and manufacturers' instructions.
- 2.3 Safety requirements for hand tools are identified and applied in line with workplace procedures.
- 2.4 Personal protective equipment required for the operation of hand tools is used in line with regulatory and workplace requirements.
- 2.5 Tools are used safely and effectively according to manufacturers' recommendations and workplace procedures.

### **Element 3: Maintain and store hand tools**

#### **Performance Criteria**

- 3.1 Hand tools are checked for faults and serviceability in line with workplace procedures.
- 3.2 Unsafe and faulty tools are identified and marked or repaired in line with workplace procedures after each complete task.
- 3.3 Hand tools are cleaned in line with workplace procedures.
- 3.4 Hand tools are stored in line with workplace and manufacturers' recommendations.

### **Element 4: Clean up work area**

#### **Performance Criteria**

- 4.1 Work is completed and appropriate personnel notified in line with workplace procedures.
- 4.2 Work area is cleared of waste, cleaned, restored and secured in line with workplace procedures.

### **Registration Data**

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