

<b>Domain</b>	<b>PLUMBING</b>	<b>Unit ID: 464</b>
<b>Title:</b>	<b>Fabricate and install flashings as part of plumbing operations</b>	
<b>Level: 3</b>		<b>Credits: 4</b>

**Purpose**

This unit standard specifies the competencies required to fabricate and install external flashings for roof systems. It includes planning and preparing for work, identifying installation requirements, fabricating and installing flashings, 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: fabricating and installing 4 square metres of metal ceiling and associated soffits; fabricating and installing metal flashings to include an apron, parapet, apron wall, hanging and step, each to a minimum of 1.5 metres; and installing a metal fascia of 2 metres in length including external angle and one internal angle.
3. 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.
4. Flashings include metal ceilings, associated soffits and fascias.
5. Tools and equipment may include but are not limited to ladders, hand and power tools, levelling equipment, measuring equipment and perimeter guard rails.
6. Materials may include but are not limited to metal rainwater goods, insulation materials such as foil laminate, blankets and bats, trims, moulds, flashings, cappings, metal self drilling and tapping screws, rivets and sealants.
7. Performance of all elements in this unit standard must comply with all relevant workplace requirements and/or manufacturers' specifications.
8. Safe operating procedures are to include but are not limited to recognising and preventing hazards associated with the use of tools and equipment, trip hazards, service lines, surrounding structures and facilities, dangerous materials, working at heights, working in proximity with others and the public.

9. 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**

Planning and preparation may include but is not be limited to workplace inspection, equipment defect identification, assessment of conditions and hazards and determination of work requirements.

#### **Performance Criteria**

- 1.1 Plans and specifications are obtained and confirmed by site inspection.
- 1.2 Health and safety requirements associated with the fabrication and installation of flashings and the workplace environment are adhered to throughout the work in line with workplace procedures.
- 1.3 Quality assurance requirements are identified and adhered to in line with workplace requirements.
- 1.4 Tasks are planned and sequenced in conjunction with others involved in or affected by the work.
- 1.5 Tools and equipment, including personal safety equipment, are selected and checked for serviceability in line with workplace procedures.
- 1.6 Work area is prepared to support the efficient fabrication and installation of flashings.

## **Element 2: Identify installation requirements**

### **Performance criteria**

- 2.1 Flashings to be installed are identified and working drawings and patterns are developed from job drawings, plans and specifications and site measurements.
- 2.2 Materials, coatings, fixings, sealants and fasteners are checked for compliance with plans, specifications and standards and are compatible with adjacent materials and catchments.
- 2.3 Materials are identified and ordered or collected in line with workplace procedures.
- 2.4 Materials and equipment are checked for compliance with docket/order form and for acceptable condition.

## **Element 3: Fabricate and install flashings**

### **Performance criteria**

- 3.1 Flashings are fabricated in compliance with standards, drawings and specifications and site measurements.
- 3.2 Support framework is set out where required and fixed to comply with in line with plans, specifications and manufacturers' recommendations.
- 3.3 Thermal insulation, where required, is fixed in line with plans, specifications and manufacturers' recommendations.
- 3.4 Set out and fixing is installed to comply with cladding manufacturers' specifications and job specifications.

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

### **Performance criteria**

- 4.1 Work area is cleared and materials disposed of or recycled in line with workplace procedures.
- 4.2 Tools and equipment are cleaned, checked, maintained and stored in line with manufacturers' recommendations and workplace procedures.
- 4.3 Documentation is completed 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